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ABSTRACT

The Regional Seminar on Educational Evaluation held in Dar es Salaam, Tanzania, from 7 April to 2 May 1975, was organized as a follow-up activity to a study carried out by the International Institute for Educational Planning (IIEP, Paris) in 1973-1974. The International Bank for Reconstruction and Development had in 1973 requested the IIEP to "develop practical methods for evaluating major education aspects of Bank-financed education projects during and after project implementation, propose technical criteria for such evaluations and suggest the necessary means and machineries for the application". Instruction was provided in: specifying educational objectives - techniques and procedures; educational measurement; test construction; attitude scale construction; questionnaire design; curriculum development and evaluation; interaction analysis; and sampling. The lecture sessions focused on: general aspects of evaluation - purposes, types, and uses; specific aspects of examinations for assessing standards of performance and selection; the design of non-formal education and training programs; general guidelines for the use and implementation of education tracer systems; approaches to the evaluation of educational systems through the use of cross-sectional surveys. Results of individual and group projects are appended. (Author/MV)

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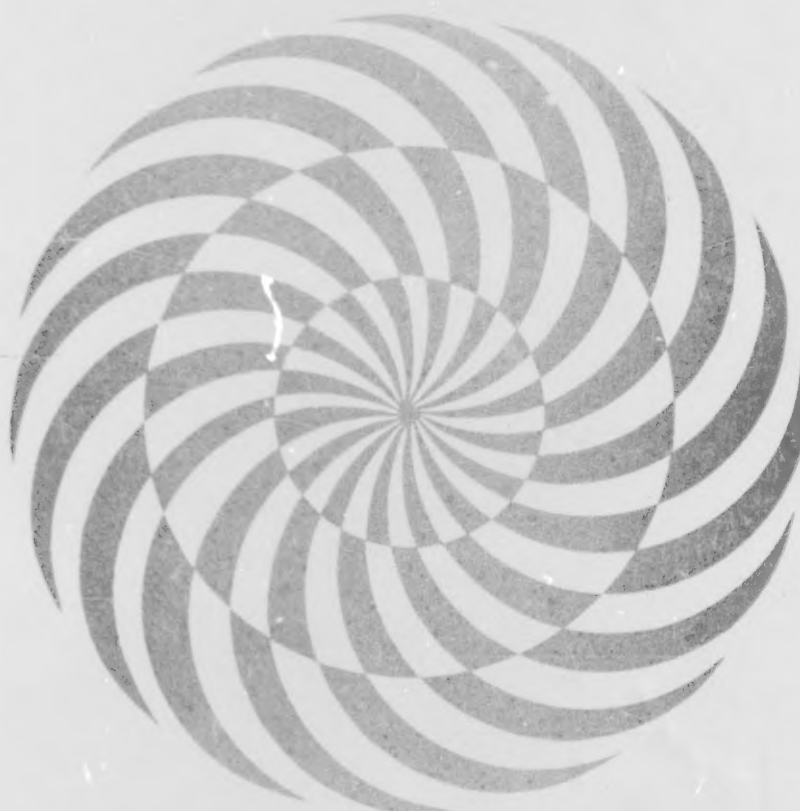
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Report of the

African Regional Seminar on Educational Evaluation

Dar es Salaam, Tanzania, 7 April - 2 May 1975

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International Institute for Educational Planning (Unesco)
and
International Bank for Reconstruction and Development

REPORT OF THE AFRICAN REGIONAL SEMINAR ON
EDUCATIONAL EVALUATION HELD IN DAR ES SALAAM
FROM 7 APRIL TO 2 MAY 1975

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PREFACE

In co-operation with the International Bank for Reconstruction and Development (IBRD), the IIEP held a Regional Seminar on Educational Evaluation in Dar es Salaam from 7 April to 2 May 1975. As part of the overall IBRD-IIEP project on educational evaluation, this seminar was designed to help meet the need for competent local evaluation specialists who are able to undertake the systematic evaluation of major programmes and projects in educational development. In a further phase of this joint project, it is hoped to engage some of the seminar participants in a major evaluation project, thereby both utilizing and further developing the skills they acquired.

This report provides a record of the seminar and its results. We have found it particularly instructive to include as annexes the various designs for evaluation projects which were developed by teams of participants in the course of the seminar. All the participants will actually be conducting these projects in the near future, and I believe that this experience will further add to the seminar's training value.

A great deal of credit for the success of the seminar goes to Dr. T. Neville Postlethwaite whose competence in the field of educational evaluation and whose organizational and pedagogical skills were a major asset to the course. I would also like to thank the faculty of the seminar who have contributed greatly to making this such an intensive and useful learning experience. The co-operation of our colleagues in the Education Department of the World Bank as well as the Bank's financial assistance is most gratefully acknowledged; we look forward to continued joint efforts in this important field.

The Government of Tanzania has been a generous host to the seminar, and I would like to express the appreciation of everybody involved in the course.

Hans N. Weiler
Director, IIEP

REPORT OF THE REGIONAL SEMINAR ON EDUCATIONAL EVALUATION,
DAR ES SALAAM, 7 APRIL - 2 MAY 1975

T. Neville Postlethwaite

INTRODUCTION

The Regional Seminar on Educational Evaluation held in Dar es Salaam, Tanzania, from 7 April to 2 May 1975, was organized as a follow-up activity to a study carried out by the International Institute for Educational Planning (IIEP, Paris) in 1973-1974. The International Bank for Reconstruction and Development had in 1973 requested the IIEP to "develop practical methods for evaluating major education aspects of Bank-financed education projects during and after project implementation, propose technical criteria for such evaluations and suggest the necessary means and machineries for the application".

The first phase of this project had been to provide the World Bank with a methodology to evaluate the education projects of the 1960s (during 1963-1972, 71 education projects in 49 countries at a total project cost of US \$1,140 million had been approved and the quality, performance and impact on society of the educational institutions involved through these 71 projects remained to be evaluated). A report, "Methodology for the Evaluation of Educational Attainments",^{1/} focused on particular aspects of the educational projects: curriculum development, student achievement, teacher education and teacher effectiveness.

One of the major recommendations of the Phase I report was that competency in evaluation should be trained within the nations involved in World Bank projects, such that they can carry out their own evaluation of the effectiveness of on-going projects, since the people in a country are in a better position both to conceptualize and to interpret the statistical analyses and results. The second phase of the project was therefore split into two parts: firstly to undertake the training of local personnel in the skills of evaluation, and secondly, to administer an evaluation project with the help of the personnel trained in this way.

Tanzania was chosen as the site for the first part of this second phase because of its special situation at the time of the study. The Ministry of Education had in effect been subdivided into four distinct sections (Primary Education, Secondary Education, Adult Education and Teacher Training), each section having its respective evaluation unit. The Institutes of Education and Adult Education had also been incorporated into the Ministry of Education as parastatal organizations. It was felt that this reorganization provided an ideal setting for the second phase of the World Bank's project, but that on the other hand the training opportunities being offered should not be limited to Tanzania alone.

^{1/} The following IIEP staff members and consultants co-operated in the preparation of this document: Dr. T.N. Postlethwaite and R.J.D. Chesswas (IIEP), Dr. B.H. Choppin (U.K.), Professor N.L. Gage (U.S.A.), Professor A. Lewy (Israel) and Dr. D.A. Pidgeon (U.K.).

PREPARATIONS FOR THE SEMINAR

In April 1974, Dr. T.N. Postlethwaite of the IIEP and Mr. J. Maas of the World Bank discussed with Mr. Michael Kinunda, the Commissioner of National Education in Tanzania, the possibility of such a seminar.

The seminar was also discussed with the Director of the Unesco Regional Office for Education in Africa. Full collaboration was maintained throughout all stages of the seminar with the Unesco Regional Office. A representative of that office was to attend the actual seminar, but because of other commitments was unable to attend at the last minute.

The final decision to hold the course was taken in December 1974. In late January 1975, Dr. Postlethwaite visited Dar es Salaam for four days to make the detailed arrangements for the seminar. He was assisted by Mr. E. Jengo, the Acting Director of the Institute of Education, who had been appointed local co-ordinator. Also, at that time Dr. Postlethwaite had the opportunity to meet with most of the Tanzanian participants to explain to them in more detail about the course and the preparatory work to be undertaken by them before the course began. In particular, this involved each Tanzania group (primary education, adult education, secondary education and teacher education) working out in broad outline an important evaluation project the Ministry would like to undertake in the immediate future. They were also asked to work out smaller individual projects.

Upon Dr. Postlethwaite's recommendation a faculty was selected to represent the various competencies required for the evaluation themes and techniques in the seminar. Initially Dr. Arlen Lewy of Tel Aviv University was to cover the curriculum evaluation theme. In February he stated that he was unable to participate in this seminar and Dr. Wynne Harlen of Reading University replaced him. Dr. Douglas Pidgeon, Director of the Initial Teaching Alphabet Foundation, Dr. Bruce Choppin of the National Foundation for Educational Research in England and Wales, and Dr. E. Ayotunde Yoloye of the University of Ibadan all agreed initially to help in the seminar. Dr. Postlethwaite took a major part of the teaching in addition to being the course leader and hence attended for the whole seminar. The other faculty members attended for blocks of two weeks each. Drs. M. Mwaniki and G. Eshiwani of the University of Nairobi and Dr. Issa Omari of the University of Dar es Salaam were contracted to present one major session each.

The World Bank circularized the Ministries of Education in Ethiopia, Somalia, Sudan, Swaziland and Zambia asking for nominations of senior personnel to attend the course. In the absence of any reply from Zambia, Lesotho was, at the very last minute, requested to send two persons. In the end, Ethiopia, Somalia, Sudan and Swaziland sent two persons each and Lesotho sent one person. Each was sent a letter about the project outlines they were to prepare. The list of names and addresses of participants and faculty is given in Annex 1.

The list of books which were ordered and arrived in Dar es Salaam is given in Annex 2. Where 26 copies of a book were available, each participant received a copy. Where six (or five) copies are mentioned, there was one copy for each country involved, i.e. Ethiopia, Lesotho, Somalia, Sudan, Swaziland and Tanzania.

These latter sets of books were kept in the main classroom and participants borrowed them as they wished. Unfortunately, although everyone promised to bring back books borrowed, some books

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'disappeared'. The following list indicates which countries did not receive certain books. Books are listed by author:

- Ethiopia: Thorndike, Anderson et al.
- Lesotho: Thorndike, Travers
- Somalia: Amidon, Kerlinger and Pedhazur, Anderson et al.
- Sudan: Travers
- Swaziland: Gage, Travers, Kerlinger and Pedhazur, Flanders and Nuthall
- Tanzania: Guilford, Tyler, Anderson et al.

The book by Popham had not arrived by the time the seminar ended. This book as well as any of the missing books which turn up will be sent by surface mail from the Institute of Education at Dar es Salaam to the other countries. However, at the end of the course, each country team took home with it the rest of the books. These will be kept in the institutions of the persons coming from the countries such that other persons within those countries may consult them. In the case of Tanzania, copies of the books are being kept in the Institute of Education, the Institute of Adult Education and the Ministry of Education.

Four pocket calculators were purchased and put at the disposal of participants throughout the seminar. These pocket calculators will be kept at the Institute of Education at the University of Dar es Salaam but will remain the property of the World Bank until the completion of the evaluation project of the Community Education Centres. Some difficulty was experienced with the use of these calculators and in future checks should be made that such instruments have already been tested out for the climatic conditions in the country where they will be used.

OPENING CEREMONY

At 9.30 a.m. on Monday, 5 April, an official opening ceremony was held at the University of Dar es Salaam. The Commissioner of National Education, Mr. Michael Kinunda, traced the background to the setting up of this seminar (see Annex 3). The Honorable Minister of National Education, Mr. Simon Chiwanga, then opened the meeting with the following speech.

"Mr. Chairman, distinguished Seminar Participants, Ladies and Gentlemen:

It is indeed my pleasant duty to welcome participants and friends from Ethiopia, Lesotho, Somali, Sudan, Swaziland and representatives of the World Bank and the International Institute for Educational Planning, Paris, to Tanzania and to this campus. I am particularly pleased to do so because this Seminar is addressing itself to an important issue of educational evaluation in the context of the African situation.

A very important by-product of a regional Seminar such as this is the opportunity it provides for exchanging experiences, forming and strengthening relationships between participants, and for the interchange of ideas, both formally in the lecture rooms or seminar rooms and informally in a more relaxed atmosphere which I hope the beautiful campus and the peaceful city of Dar es Salaam will provide.

Mr. Chairman, today, Africa in particular is going through a major social, political and economic revolution as we adjust to the realities of independence. And yet it is apparent that the framework of educational policy and practice we inherited is at great variance with the needs and aspirations of the societies it is expected to serve. African countries need, as a matter of urgency, to re-examine and question the educational systems and to design the kind of education which is both appropriate to the needs of each society or country and which is possible for that country.

In Tanzania, the adoption of the educational policy of "Education for Self-reliance" in 1967 was a major attempt to re-examine the educational systems we inherited from the colonial government and a serious undertaking to consider the type of education relevant to the needs of the kind of society Tanzania is establishing. To quote from the booklet of "Education for Self-reliance":

"Since long before independence the people of this country, under the leadership of TANU, have been demanding more education for their children. But we have never really stopped to consider why we want education - what its purpose is. Therefore, although over time there have been various criticisms about the details of curricula provided in the schools, we have not until now questioned the basic system of education which we took over at independence..."

It is now time that we looked at the justification for a poor society like ours spending almost 20% of its Government revenue on providing education for its children and young people, and began to consider what that education should be doing."

Implicit in these statements is the necessity to reformulate the objectives and goals to reflect the needs and aspirations of Tanzania society. Basically the new educational policy demands that the educational effort should be directed at the needs of the society, the nation and the majority of the pupils. It calls for the integration of the school with the community. Education should be integrated

with production, that is "schools should be economic communities as well as educational communities". While practising self-reliance, the pupils will learn new skills and knowledge useful to their future life, they will learn the relevance of the scientific principles they learn in the classrooms to the practical problems in life and will adopt a positive attitude towards work. Thus work becomes part of education and education is for the service of the fellow human beings and of the society.

The availability and collection of data which is relevant, reliable, accurate and which is then summarized and analyzed with minimum bias, forms the basis for decisions at the various stages of implementing a project or programme. This, I believe, is the essence of evaluation. I do not wish to attempt to provide a scientific definition and explanation of educational evaluation. I am informed that this Seminar will give you ample opportunity for detailed discussions. All I would like to emphasize is the very basic need and importance of educational evaluation in the planning and development process. Consequent upon this, is the importance for everyone to be aware of the value of and need for evaluation. In one aspect therefore, evaluation is primarily an attitude. The very base of all evaluation, I think, is the existence and furthering of a positive attitude to the evaluation process. This is a semi-political, semi-psychological problem. But evaluation is also primarily a technique and techniques are equally important. The attitude aspect and technique aspect of evaluation are in no way exclusive. Perhaps the main question is where and when the main stress should lie.

Related to this, is the question of the fear of evaluation in some quarters and by some individuals. In some cases, for example, the term evaluation carries the meaning of control. Sometimes, this fear is more a distrust of the increasingly sophisticated techniques involved in evaluation. Sometimes too, suspicion is the result of the irrelevance of research or evaluation to the real problems of the country, to the unwillingness of evaluators to modify and adapt their techniques to suit a given situation, and to the unpreparedness to take into account restrictions such as manpower, lack of data, time factors and cost.

Mr. Chairman, I am pleased to note from your work programme that the Seminar, both at a theoretical and practical level, will address itself to such crucial and basic questions as: (i) What is evaluation? (ii) Why evaluate? (iii) What is evaluated? (iv) Who is the evaluator?

But since education cannot be evaluated in isolation, it must comprise an evaluation of changes in the society of which education is a part. I would therefore, think that an educational evaluation must be: (i) practical, and related to real problems; (ii) intelligible to all involved; (iii) continuous; and (iv) popular and national. That is it should not be imposed from above nor from outside. It should be firmly rooted in the consciousness of the people, and should come from within and from below.

For no matter how well planned and carefully executed an evaluation from outside is, there is always the danger of the feeling of uncertainty, of misunderstanding or of even suspicion and distrust. This, however, should not be confused with co-operation which is a very important aspect in evaluation.

One of the major problems facing the developing countries of Africa in particular, is the lack of competent, qualified and experienced local people in educational evaluation in sufficient

numbers. It is in this respect that I would like to pay tribute to the IIEP for their initiative to organise Seminars and Workshops to train local people to handle their own evaluation problems. A Seminar such as this one may have a very quick multiplier effect and give increased possibilities for running regional and national courses.

We should not, however, overlook the fact that some kind of evaluation has been going on in our countries for very many years although it has been largely ineffective and inadequate. Seminars such as this one provide the opportunity of learning many other forms of evaluation, improved techniques and procedures. But the biggest challenge is the competence to utilize them, and to adapt and modify them to different situations.

In Tanzania, the implementation of "Education for Self-reliance" carries the obligation of evaluation. I believe that we have recognized and accepted the importance of evaluation. The organisational set-up of the Ministry, the Institute of Education, the Institute of Adult Education and the regions, for example, reflects the importance we attach to educational evaluation. There is a strong Evaluation or Inspectorate Unit in each of the technical divisions of the Ministry and the Institutes mentioned.

Yet, in spite of our good intentions, we cannot claim that we have been very successful in implementing the educational reform and in carrying out effective and desirable evaluation. There is a lot still unaccomplished. I do not wish to enumerate our failures or shortcomings nor the reasons for them. Nor do I wish to give the impression that our efforts have been without achievements. The evaluation of the Functional Literacy Pilot project in Mwanza, the 'Mtu ni Afya' campaign and the MTUU (Tanzania, Unicef/Unesco Primary Education Reform Project) have been very rewarding experiences.

But perhaps the biggest achievement of all is the organisation of this Seminar which I hope will lead to the institution of a more systematic and comprehensive educational evaluation not only in Tanzania but also in other participating countries.

I wish to express my Government's deep appreciation for the understanding, and willingness of the IIEP and the World Bank to organise and finance this Seminar, the first of its kind in Tanzania. We do hope that this co-operation will continue.

There is an English proverb that says "The proof of the pudding lies in the eating". The success of the Seminar therefore will be measured by your effectiveness as evaluators in real situations after the Seminar.

I know that this is going to be a very busy working session. But I am sure all of you are determined to benefit from it. I wish you every success."

THE COURSE

The actual timetable for the course is given in Annex 4. This is slightly different from the original timetable in the following respects. Professor Yoloye should have arrived to teach on the second and third weeks of the course. He was unable to attend the course because of an unexpected assignment at his own university. Happily, Dr. Omari of the University of Dar es Salaam was able to give us more time than originally anticipated and thus replaced Dr. Yoloye's contribution. Dr. Yoloye had sent in his lecture outlines in advance and these were useful.

The discussion of the Tanzanian group projects and other country projects took up more time than originally expected. This, however, provided an opportunity of taking up particular technical problems as they arose in projects and thereby reviewing and supplementing certain points which were dealt with in more formal lecture sessions. Indeed, the elaboration of the initial projects into fully detailed evaluation proposals (some of them very different from the projects originally envisaged by the participants) took a great deal of time. The participants worked extremely hard. Further to the four Tanzanian group projects a fifth was added, concerning the evaluation of Tanzanian community education centres.

Work over the first two weeks was of three kinds:

- (1) direct instruction on the techniques needed for evaluation;
- (2) information discussion sessions covering more general aspects of evaluation; and
- (3) group and individual sessions with trainees discussing aspects of their learning and their evaluation projects.

The direct instruction sessions included:

- (i) Specifying education objectives - techniques and procedures. Practical exercises were given which were generally very well carried out.
- (ii) An introduction to educational measurement, concerning types of scales, distributions, measures of central tendency, variance and standard deviation, correlation, the concepts of validity and reliability and errors of measurement. Practical exercises were given.
- (iii) Test construction - outlining the stages to be followed, including item writing, editing, try-out and item analyses.
- (iv) Attitude scale construction, including Bogardus, Thurstone, Likert and Guttman scaling techniques.
- (v) Questionnaire design.
- (vi) General steps in curriculum development and the evaluation undertaken at each stage of the development process.
- (vii) Interaction analysis - Flanders and Bellack, and problems associated with their adaptation.
- (viii) Sampling.

The general discussion sessions included lectures on:

- (i) General aspects of evaluation - purposes, types, uses, etc.
- (ii) Aspects of examinations - for assessing standards of performance and selection.
- (iii) The design of non-formal education and training programmes. The variety and interdependence of factors which must be considered as part of such a design were discussed.
- (iv) Some general guidelines for the use and implementation of education tracer systems, both for formal and non-formal education.
- (v) Approaches to the evaluation of educational systems through the use of cross-sectional surveys. This lecture drew heavily on the recent IEA studies.

These lectures led to general discussions covering problems associated with the education systems in the different countries represented by the students, and the different types of examinations and selection procedures in the countries concerned. The dependence of examinations and teacher training on curriculum development was stressed.

The particular problems of some of the participants in non-formal programmes and their evaluation were thoroughly discussed. The general use of educational surveys raised many questions and many hopes for their future use in several participating countries.

Regional Seminar on Educational Evaluation

Generous time was given to detailed discussions on the various group evaluation projects put forward by the students and help given to them so that they could state more clearly exactly what each project entailed and how it was to be carried out.

A number of sessions were devoted to discussions with individual students, covering both the aspects of the course on which they were experiencing difficulty and details of the project on which they intended working.

The first two weeks ended with an educational visit to Iringa and the Ujamaa village of Kilolo, its school and school shamba and the village itself. All non-Tanzanians as well as ten Tanzanians participated in this educational visit. This was a most informative visit and all profited from and enjoyed it. The principal of the National Teacher Training College in Iringa organised a concert of singing and dancing by local primary school children. It was of a very high standard. The long bus journey to and from Iringa was alleviated when we passed through Mikumi national park and saw wild animals.

In the last two weeks, two new faculty arrived (Dr. Choppin and Dr. Harlen) and there were two visits by outside lecturers (Dr. Eshiwani and Dr. Mwaniki, both from the University of Nairobi).

The format was the same as the first two weeks - namely lectures, lecture discussions and individual and group consultation.

The lectures centred on various aspects of curriculum evaluation and statistical techniques (see Annex 4). Included in this were two sessions devoted to the use of sorters, computers and pocket calculators (particularly the SR-51 used on the course).

The curriculum evaluation lectures led to lively discussions. The two outside lecturers provided good examples of the types of practical problems involved in evaluation projects in East Africa. The last two weeks were marked by much more lively and critical questioning on the part of the participants than in the first two weeks, probably due to a great extent to the solid groundwork put in during the first two weeks.

Much more effort was devoted to individual (for individual projects) consultation and group (for group projects) consultation. The aim in each case was to develop an evaluation proposal such that each step, and the reasons for each step would be clearly spelled out and that the final document could act as the basis for conducting the evaluation following the end of the Seminar. The reports of the following are included as Annexes 5-15.

Annex 5 : An evaluation of Tanzanian community education

E.E. Mushi
R. Mpungu
A. Hauli

Annex 6 : The learning of Kiswahili in standards 1 and 2 in Tanzanian primary schools

A. Hauli
G. Mizambwa
L. Masota
W. Bavu
M. Chipa

Annex 7 : Economic achievements of education for self-reliance in secondary schools

A. Lema
I.E. Nkya
B. Katigula
C.M. Gunze
J.U. Mwasendwa

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Annex 8 : An evaluation of the effectiveness of rural libraries in retaining permanent literacy in Tanzania	B. A. P. Mahai R. B. Mpunga M. Kimambo
Annex 9 : The evaluation of teacher education curriculum with special reference to the skills and attitudes demanded for community education in Tanzania	J. S. Meena G. Shayo P. D. Komba E. E. Moshi M. Sanga
Annex 10 : Proposals for the evaluation of rural education centres in Swaziland	S. B. Dube A. C. Dawson
Annex 11 : A Sudanese comparative study for two categories of primary school teachers in the Sudan	M. El Hussein
Annex 12 : Higher secondary education in the Sudan	A. R. Tayfour
Annex 13 : The 'Zemecha' (Development through co-operation, enlightenment and work) evaluation project in Ethiopia	G. Kuusa K. Friesenbet
Annex 14 : Selection from primary to secondary school in Somalia	A. Gare Ali G. Musa Affi
Annex 15 : The evaluation of the work of rural education centres in Lesotho	M. R. Montsi

SEMINAR EVALUATION

During the Third Week a questionnaire committee [Hussein (Chairman), Dawson, Nkya and Ali] constructed a questionnaire to evaluate the Seminar. This is given as Annex 16. The questionnaire was completed by all participants and observers during the last weekend of the course. The results were calculated at the beginning of the Fourth Week and are also given in Annex 16. The following are the major findings as written by Mr. Nkya of the questionnaire committee:

"The overall findings indicate that the Seminar was a success, although nearly all participants felt that four weeks was too short for the amount of information they had to absorb. Certain difficulties were encountered by outside participants with their stay on the university campus and, in future, more care must be taken over campus accommodation. More specifically the following findings are worthy of note:

(a) Preparatory phase of course. A minimum of three-four months' notice of such a course is desirable. In general, there should be more than two participants from each country but from different institutions within the country. Again selected participants should be informed of their being accepted for the course some three months before the course begins and the letter sent to participants should stress the need for participants to prepare themselves, particularly statistically, before the course. The intensive nature of the course and the dedication to work required during the course should be given special emphasis. The nature of each project to be completed by the end of the course should be spelled out in more detail.

(b) The Seminar itself. The level and relevance of the Seminar were judged to be adequate and high. The technique of having all faculty present at every session with full active participation by all faculty and participants throughout all lectures and discussions was judged to be excellent. In particular the participants commented on the high level, hard-working and co-operative nature of the permanent faculty. The lunch break was of one-hour duration and there was a general desire that, in future, this should be at least 1 1/2 - 2 hours.

The visit to Iringa and Kilolo was considered worthwhile but the organisation of the visit could have been improved. The room facilities for those on campus were poor in that the rooms were cleaned and the beds changed irregularly. There was no drinking water and there was too much noise from other campus inhabitants. The social facilities were poor and transportation to town difficult. However, the quality of the food was high.

(c) Follow-up of Seminar. All felt that there was a great need for similar educational evaluation seminars to be held in the future. Furthermore, it was suggested that special seminars on curriculum development and techniques of examining should be run. The IIEP should consider establishing some mechanism by which Seminar participants are kept informed of the progress of each other's work, the development of new modes and techniques of evaluation and information on the names and addresses of persons involved in particular types of evaluation."

SEMINAR LEADER'S COMMENTS

As leader of the Seminar, I should like to say that I consider the Seminar to have been a great success. Nearly all participants learned an enormous amount. I have never experienced such a high motivation to learn in any previous seminar. It was very impressive. Participants and faculty worked extremely hard throughout the four weeks. I would like to extend my congratulations and thanks to Douglas Pidgeon, Bruce Choppin and Wynne Harlen for their efforts and unfailing support. The group reports, appearing as annexes in this document speak for themselves. The work required to learn research design, sampling, measurement theory, instrument construction, etc., was formidable in order to be able to produce the reports. The real work will now begin as each evaluation project gets under way. The task that lies ahead is not an easy one but with hard work and good will the projects will be accomplished and the results will allow the educational decision-makers in each country to have a much sounder information base for their decisions.

CLOSING CEREMONY

At noon on 1 May, the Tanzanian Commissioner of National Education formally closed the Seminar (although many participants continued work with Dr. Choppin through 2 May) with the following words:

Mr. Chairman, members of the faculty, distinguished participants, Ladies and Gentlemen,

Let me once again express my deep pleasure to be with you at this hour and to thank you for inviting me to close this four-week intensive workshop. I am particularly delighted to perform this task of closing the workshop on this particular day - the Workers' Day.

This is a most opportune moment to remind ourselves, as educators and evaluators, of the significance of work in the context of Education. Education, particularly in Africa, is being recognized as a major instrument of development. Education must therefore be clearly and closely linked to work in all fields. Work should be part of education. Indeed, work and education are inseparable. The separation of work from education leads to the stratification of the society - the masters or the privileged who are well-educated and the ruled who are given something like literacy skills needed to serve the privileged. Education then becomes the means for evading work. If education is to be

meaningful at all, this attitude must change. The dignity and creativity of work has to be restored to enable man to control and change the environment for the benefit of himself, of his neighbour and of the society.

"If we are to make real progress in adult education it is essential that we should stop trying to divide up life into sections, one of which is for education and another, longer, one of which for work with occasional time-off for 'courses'. In a country dedicated to change, we must accept that education and working are both parts of living and should continue from birth until we die." (Tanzania Ten years after independence, Report by the President of TANU, Mwalimu Julius K. Nyerere)

Arising from this is the need for everyone, including those for schools, to contribute towards meeting the cost of education. Statistics have revealed that most African countries have not reached the targets agreed for universal education at the 1961 Addis Ababa Conference. Already by 1970 very few African countries were devoting less than 3 per cent of their National Income on education. A substantial group of countries was spending 4 to 5 per cent of their GNP equivalent to 15 to 25 per cent of their National Budget on education. Some countries were spending as much as 7 per cent of their GNP, corresponding to 30 per cent of their National Budget. In spite of this heavy investment in education, basic education for everyone in most African countries is still an expressed desire and not a reality. There is the grave danger of losing the battle against illiteracy. In Tanzania, for example only 55 per cent of all the children of school age are provided with formal basic education. The education costs do not seem to show a downward trend. In fact they are biting even deeper into the financial budgets which are already stretched out to the limits. We do not seem to be getting the pay-off commensurate with increased investment. It is obvious that we cannot universalize education without universalizing work. It is important, therefore, that we as curriculum experts and evaluators fully understand this policy of work as part of education and its implications in the implementation.

During the last four intensive weeks, you have been exposed to many ideas, trends, and techniques of educational evaluation. You have been extremely fortunate to have the competent international faculty to lead the workshop.

I believe that at the close of this workshop you have acquired a varying degree of competence in test and scale construction, sampling theory and practice, statistical analysis, data processing and so on. You had the opportunity of applying the theory you have learned in practical work particularly in your individual and group projects. The hard work you have put into this workshop must have earned you some sense of achievement and satisfaction of which you must be proud. I wish to take this opportunity of congratulating you all for surviving through the workshop. It is apparent that your attitude towards evaluation is more positive now than it was before, and that your competence has been raised. The crucial question before us now is where do we go from here?

While opening this workshop on 7 April, the Honourable Minister for Education explained the benefits which can be derived from international or regional seminars such as this one. It is my sincere hope that the varied and valuable experiences represented in this Seminar have enlightened all participants, and as we part today, I hope as friends and comrades, each of us has learned to

know and appreciate each other, and is carrying back not only the pleasant memories of friendly and fruitful discussions, but also a new determination about our responsibilities as policy-makers, as curriculum specialists or evaluators. Let me hope that this workshop has paved the way to greater regional co-operation. I do hope that the flow of information both formally or informally across the countries represented here, for example, will not be sensitive to the artificial geographical boundaries that separate us and that some machinery will be designed to facilitate the exchange of information on innovative experiences among the countries, co-operation in undertaking research programmes and evaluation activities on issues or problems of common concern, the exchange of specialists within the region, the organisation of more regional seminars and workshops and an effective dialogue and co-operation between institutions responsible for curriculum design, research and evaluation.

This Regional Seminar was organised primarily to respond to the need of raising the competence of the local people in educational evaluation who then should be responsible for the internal evaluation of their educational programmes. The faculty and I believe that this Seminar has made a significant contribution towards satisfying this crucial need. You are now better equipped to carry out your challenging task of educational evaluation. Let us not, however, be complacent with what we have achieved during the Seminar. The challenges you will be encountering in real life situations will demand your imagination and flexibility to select and use appropriate approaches; to adapt them, and to search into new techniques and approaches. "The proof of the pudding lies in the eating" - accordingly, I hope that the individual and group projects which have been initiated by you and discussed during this Seminar as part of the important component of practical training will be completed by all of you.

We believe this work is important. It is essentially part of your training programme. But the projects are also of great value to both the policy-makers and planners.

We will do all we can to provide the kind of support needed and within the resources available to enable you to accomplish the assignment. I am sure the policy-makers and the planners will benefit from the outcome of your research.

But let me warn you that you will need to raise your competence through further studies and training to enable you to play a more effective role as a band of top evaluation specialists. You will need the co-operation and the involvement of many types of people in carrying out your tasks. This raises the necessity of transferring what you know and will know about educational evaluation to other people in many other disciplines. I believe this is going to be one of your pleasant assignments. This, I consider, is a vital task if Tanzania is to satisfy its need for qualified, experienced evaluators who are supported by an informed, critical and positively motivated public and is also to establish, on a long-term basis, a systematic, effective and efficient evaluation programme. For I believe educational evaluation, in its broad interpretation, is the sole means for ensuring the progressive and enlightened development of the people the educational system serves. Goals are often too readily set and aims too ambitiously expressed and unless a systematic (scientific) examination is made of the methods utilized to achieve these ends, there is the danger that progress may be slowed or even upset in the economic, scientific and cultural development.

Behind all this success and sense of achievement in this Seminar is the devoted, dedicated, hard-working international faculty which spared no time or energy to transfer their knowledge and experiences to you. On behalf of the Government, the Ministry of National Education and on your own behalf, I wish to express my deepest gratitude for their excellent work which the faculty willingly carried out under some difficult working conditions. We look forward to benefiting from your participation in future if and when such or similar occasions occur.

I would like to pay special tribute to Dr. Postlethwaite for his crucial and significant role in the preparation, organisation and leading of the workshop. I wish to express my sincere thanks to the IIEP and Unesco for agreeing to run this Seminar and to the World Bank for financing it. Without the support, perseverance and genuine interest of Drs. Postlethwaite and Gilpin, this workshop would have not materialized. We do hope they will continue making this important contribution to training and research.

Lastly, I wish to thank the Institute of Education for their important contribution in the organisation and running of the workshop and to the University for hosting the workshop.

To our friends from Ethiopia, Lesotho, Somalia, Sudan and Swaziland, I wish to express our special delight and deep gratitude for your presence here on the campus and in this country. We have been greatly honoured by the opportunity you have given us to learn from your wide experience. The seriousness of the intensive workshop spared no time for us to plan for social and cultural programmes to enable you to learn more about Tanzania and its people. We however look forward to welcoming you in future while on more leisurely visits.

Indeed the task in front of us is great. But it is important. It must be accomplished. Few of us will be great, but each and every one of us can make his contribution. What is needed is courage, faith, confidence and determination. To fail in courage is too often to fail in all. Only those who dare to fail greatly can even achieve greatly. Let us move together forward.

On this note, I wish to declare this Regional Seminar on Educational Evaluation closed and to wish each and every one of you Bon Voyage home. Convey our friendly greetings to your families and to all friends.

Thank you.

ANNEX 1

NAMES AND ADDRESSES OF PARTICIPANTS AND FACULTY

1. Participants

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Annex 1

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Regional Seminar on Educational Evaluation

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ANNEX 2

LIST OF BOOKS DISTRIBUTED

1. Books distributed to all participants

- EBEL, R.L., Essentials of Educational Measurement, Prentice Hall, 1972.
- OPPENHEIM, A.N., Questionnaire Design and Attitude Measurement, Basic Books, 1966.
- THORNDIKE, R.L. and HAGEN, E., Measurement and Evaluation in Psychology, and Education, John Wiley, 1969.
- BLOOM, B.S. et al., Handbook of Formative and Summative Evaluation of Student Learning, McGraw Hill, 1971.

2. Books distributed 1 copy per country

	Number of books distributed
AMIDON, E.J. and HOUGH, J.B. (Eds.), <u>Interaction Analysis: Theory, Research, and Application</u> , Reading, Mass.: Addison-Wesley, 1967.	6
ANDERSON, S.B. et al., <u>Encyclopedia of Educational Evaluation</u> , Jossey-Bass Publishers, 1975.	5
CRONBACH, L.J., <u>Essentials of Psychological Testing</u> , Harper and Row, 1970.	6
FLANDERS, N. and NUTHALL G., Special Number of the <u>International Review of Education</u> , 'The Classroom Behaviour of Teachers', Vol. XVIII, No. 4, 1972	6
GAGE, N.L., <u>Teacher Education and Teaching Effectiveness: The Search for a Scientific Basis</u> , Pacific Books, 1972.	6
GUILFORD, J., <u>Psychometric Methods</u> , McGraw Hill.	5
KERLINGER, F.N. and PEDHAZUR, E.J., <u>Multiple Regression in Behavioral Research</u> , Holt, Rinehart and Winston, 1973	5
POPHAM, J., <u>Criterion Referenced Measurement: An Introduction</u> , Ed. Tech. Publishers, 1971.	(Did not arrive by end of course)
THORNDIKE, R.L. (Ed.), <u>Educational Measurement</u> , American Council on Education, 1971.	5
TRAVERS, R.L., <u>Second Handbook of Research on Teaching</u> , Rand McNally, 1973/74	5
TYLER, R.W., <u>Basic Principles of Curriculum and Instruction</u> , University of Chicago Press, 1949.	6

ANNEX 3

A BACKGROUND TO THE REGIONAL SEMINAR ON EDUCATIONAL EVALUATION 7 APRIL - 2 MAY 1975 - DAR-ES-SALAAM

M.J. Kinunda
Commissioner for National Education

"Honorable Minister, distinguished participants, Ladies and Gentlemen,
Permit me, Mr. Minister to turn into a historian before you formally open this seminar and
'pronounce the benediction'.

The idea of this seminar originated in the office of the Commissioner for National Education
early last year during the visit of Mr. J. Maa of the World Bank, and Dr. T.N. Postlethwaite of the
International Institute for Educational Planning, UNESCO, to Tanzania.

1. As you know, the 4th IDA Education Project includes an important component, namely the
setting-up of eight Community Education Centres. To quote from Dr. Postlethwaite's notes:

"On the basis of a review, carried out by IIEP, of Bank education project
reports, it is proposed that a set of evaluation procedures be applied in
Tanzania. The Bank's fourth Tanzanian education project includes, as
an important component, the setting-up of eight Community Education
Centres (CECs), which should provide basic education for adults
as well as children. The major qualitative aspects of education (i.e.
curriculum, teacher training and student learning) are all integrated
in this particular project. The CECs represent a new concept of
education in Africa. If successfully implemented they would constitute
a major contribution to the socio-economic development of Tanzania.
They might also serve as models for similar activities in other countries".

2. Careful observation of their internal activities and their impact on the Community was
therefore required and the setting-up of a formative evaluation was justified. Such evaluation would
be useful both to the Government of Tanzania and the World Bank. The original idea was to set up
and carry out this evaluation with finance from the Bank by using experts from outside the country
with maximum co-operation and involvement of local people through the counterpart scheme. Thus
it would be a joint World Bank-Tanzania venture. We however, believed that a better alternative
was to raise the competence of the local people in evaluation techniques first, through intensive
training and then to make the local people responsible for the formative evaluation of the Community
Education Centres with assistance from the Bank whenever appropriate. Some of the reasons for
recommending this alternative were:

The educational process could not be isolated from the society and
educational evaluation implicitly involves the society - its culture,
tradition, its changes. Evaluation from within was considered to be
more desirable and fruitful.

The evaluation of the CECs would only deal with a sub-system of
the total educational system. Because of the interdependence of the
sub-systems, the evaluation of all the sub-systems or the total
educational system was more meaningful and was indeed the objective
of the Ministry.

The counterpart scheme was considered a less efficient and effective way of raising the competence of the local people in educational evaluation in the numbers needed, in the various specialities within the shortest possible time. The multiplier effect would produce very little impact.

3. I am most grateful to Dr. Postlethwaite and Mr. Maas for their understanding and for accepting the Ministry's proposal. Within a day, Dr. Postlethwaite produced a draft document which made proposals for a workshop in educational evaluation in Tanzania and also proposals for the plans and procedures for the formative evaluation of the CEC after the workshop which would be undertaken by selected Tanzanians who had participated in the workshop co-operating with a team of experts from outside. The proposals were studied by the Institute of Education and the Ministry; and a final request document was prepared by Dr. Postlethwaite and submitted to the World Bank, for their consideration.

The idea which was born early last year has now become a reality. The seminar has acquired an international character with the participation of friends from Ethiopia, Lesotho, Somali, Sudan and Swaziland. The seminar is under a powerful international faculty. It augurs well for success. This is a significant example of international co-operation.

Indeed the Seminar's size of 25 participants has disappointed very many who were anxious to participate in the workshop. I do hope that the World Bank and IIEP will continue providing other opportunities in the future for our people to benefit from such training. I do hope this is the beginning of a permanent training programme at the national and sub-national levels, and that regional co-operation will be further strengthened.

Honorable Minister, the Seminar now is anxious to receive your blessing.

Thank you".

ANNEX 4

REGIONAL SEMINAR ON EDUCATIONAL EVALUATION - TIME-TABLE

FIRST WEEK

Monday, 7 April

Session 1	Official opening Administrative announcement by E. Jengo Introduction of faculty and participants	T. N. Postlethwaite
10:30 - 11:00	Coffee break	
Session 2		
11:00 - 12:30	Why evaluate?	D. A. Pidgeon*
12:30 - 1:30	Lunch	
Session 3		
1:30 - 3:00	The design of rural education programmes	C. Gilpin
3:00 - 3:30	Coffee break	
Session 4		
3:30 - 5:00	The use of evaluation in curriculum development and the organisation of a curriculum centre	T. N. Postlethwaite*

Tuesday, 8 April

Session 1)	Group work to discuss four Tanzanian projects and individual projects	All Faculty
Session 2)		
Session 3	Specifying educational objectives for evaluation purposes (including content analysis and blue-printing)	T. N. Postlethwaite
Session 4	Practical work	D. A. Pidgeon

Wednesday, 9 April

Session 1)	Group work to discuss projects from Ethiopia, Somalia, Sudan and Swaziland	All Faculty
Session 2)		
Session 3	"Introduction to the theory of measurement and achievement". This will include the concepts of scales of measurement, reliability, error, ability and dispersion	D. A. Pidgeon
Session 4	Practical work	D. A. Pidgeon

Thursday, 10 April

Session 1	Questionnaire construction	T. N. Postlethwaite
Session 2	Test construction; item writing; item analysis	D. A. Pidgeon and T. N. Postlethwaite
Session 3	Item writing; item analysis (including X, c, fd)	D. A. Pidgeon and T. N. Postlethwaite
Session 4	Practical work	D. A. Pidgeon and T. N. Postlethwaite

* An asterisk denotes that this lecture will be open to members of the Tanzanian Ministry of Education and the University of Dar es Salaam.

Friday, 11 April

Session 1	Individual consultation and study	All Faculty
Session 2	The use of tracer studies in evaluating the efficiency of training programmes	C. Gilpin
Session 3	Evaluation of the pedagogical aspects of national systems of education	T.N. Postlethwaite*
Session 4	Discussion of above plus consultation	T.N. Postlethwaite and D.A. Pidgeon
Session 5 5:00 - 6:30	General discussion of World Bank's new education policy paper	C. Gilpin

SECOND WEEKMonday, 14 April

Session 1)	Attitude scale construction	T.N. Postlethwaite
Session 2)		
Session 3)	Individual consultation and study	All Faculty
Session 4)		

Tuesday, 15 April

Session 1)	Examinations: their uses and abuses	D.A. Pidgeon*
Session 2)		
Session 3)	Individual consultation and study	All Faculty
Session 4)		

Wednesday, 16 April

Session 1)	Interaction analysis	I.M. Omari
Session 2)		
Session 3)	Individual consultation and study	All Faculty
Session 4)		

Thursday, 17 April

Session 1	Sampling, judgment, quota, probability	T.N. Postlethwaite
Session 2)		
Session 3)	Educational visit to Iringa	
Session 4)		

Friday, 18 April

All day	Educational visit to Kilolo	
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Saturday, 19 April

All day	Return from Iringa to Dar es Salaam	
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THIRD WEEKMonday, 21 April

Session 1	Research design	T.N. Postlethwaite
Session 2	Up-to-date report on projects to acquaint incoming faculty	All Faculty
Session 3	Models of curriculum evaluation	W. Harlen
Session 4	Individual consultation	All Faculty
5:00 p.m.	Party given by the Institute of Education, University of Dar es Salaam	

Regional Seminar on Educational Evaluation

Tuesday, 22 April

Session 1)	Correlations and Chi-squared	B. H. Choppin
Session 2)		
Session 3)	Individual consultation	All Faculty
Session 4)		

Wednesday, 23 April

Session 1	Up-to-date report on projects to acquaint incoming faculty	All Faculty
Session 2	Individual consultation	All Faculty
Session 3	Inter-rater reliability	B. H. Choppin
Session 4	The role of evaluation in the curriculum development process, particularly at implementation stage	W. Harlen and T. N. Postlethwaite

Thursday, 24 April

Session 1	Individual work	All Faculty
Session 2	ANOVA and simple regression	B. H. Choppin
)	Data processing - simple techniques	
Session 3)	including visit to University Computer Centre	B. H. Choppin
)		
Session 4	Free	

Friday, 25 April

Session 1)	Individual work	All Faculty
Session 2)		
Session 3	Research into methods of teaching maths	E. Eshiwani
Session 4	Discussion (and/or individual work)	

FOURTH WEEK

Monday, 28 April

Session 1)	Curriculum evaluation within a school	W. Harlen
Session 2)		
Session 3	For non-Tanzanians - Question and Answer Session on Tanzanian educational system	M. Kinunda
Session 4	For Tanzanians - Individual work	

Tuesday, 29 April

Session 1	The measurement of home environment in East Africa	Mebo Mwaniki
Session 2	MANOVA	B. H. Choppin
Session 3)	Individual work	All Faculty
Session 4)		

Wednesday, 30 April

Session 1)	Presentation of Tanzanian groups 3 & 4	All Faculty
Session 2)		
Session 3	Use of pocket calculators	B. H. Choppin
Session 4	Individual work and small group to Computer Centre	B. H. Choppin

Thursday, 1 May

Session 1)	Individual project presentation	All Faculty
Session 2)		
12:00 - 12:30	Concluding Session	M. Kinunda Commissioner for Education, Tanzania

ANNEX 5

AN EVALUATION OF TANZANIAN COMMUNITY EDUCATION

E. E. Moshi
R. Mpungu
A. Hauli

INTRODUCTION

President Nyerere in his national policy and philosophy on Education for Self-reliance (1967) calls for a complete overhaul of the education system in a planned way. New skills, attitudes, and knowledge badly needed for rural development need to be imparted.

New educational objectives stated in operational terms should be developed in the new education so as to reflect the 'Ujamaa' way of life Tanzania is building. 'Ujama' describes Tanzania's unique brand of socialism. The epitome of participation and co-operation is to be found in the Ujamas villages. Here the villagers collectively run all aspects of their lives together and participate in decision-making related to education, welfare, housing, medical facilities, etc. The new community education curriculum being developed now is meant to reflect and address itself to the various needs of the community. Thus, the community education is composed of two integral components of curricula namely, a functional adult education curriculum and a complete, functional and terminal 7 years primary education. These two programmes operate concurrently within the community Education Centres facilities.

The new community Education centre is meant to bridge the gap that has existed for many years between the school and the community as well as the education of children and that of adult members of the community. The system of education that we have been pursuing so far have created hopes and desires in life that cannot be attained by a majority of the school leavers as well as that of the adult members. These attitudes still persist and have become a major problem in Tanzanian education. They can only be removed by proper planning and implementation of a community education will serve as a valuable guide to decision making by ministry officials ; curriculum developers and future researchers and that it will improve immensely the life-long education now being developed in Tanzania. It is hoped that the pilot CECs now being developed will form a basis for educational evaluation of greater reliability, validity and practicability of the proposed changes. Therefore, every care must be taken in establishing this formative and summative evaluation programme.

Major Objectives of Study

In order to advance and enhance the new program, up-to date information on several aspects of community education will be needed. The most important objectives selected for study are:

CECs

1. To assess the extent to which selected communities achieve self-reliance.
2. To assess the extent to which the new 'education' will change daily habits of life of both children and adults.

3. To what extent do the children in standard seven achieve selected cognitive and attitudinal objectives (the latter as compared with non - CEC children).

Specific objectives

1. To assess the extent to which the community as a whole
 - (a) produce food required by community or can acquire money for food required.
 - (b) earns surplus money.
 - (c) provides all skills and knowledge required by community for self-reliance.
 - (d) have following attitudes: (i) blue and white collar jobs are regarded with equal esteem;
 - (ii) remaining in village is a desirable behavior; (iii) self-reliant community work of equal status with urban employment.
2. To assess the extent to which the new 'education' achieves the following:
 - (i) All adults in community achieve basic literacy and numeracy;
 - (ii) All adults in community participate in 'life long education' courses for the community;
 - (iii) All adults engage in activities to improve standards of housing, food, agricultural farming, individual health and child care;
 - (iv) Adults will accept community education centre as providing terminal education for all children in community.
 - (v) Adults make use of: (a) library facilities (visit once a week); (b) health centre (attend when experiencing a health problem); (c) welfare centre (no. of attendances for cultural activity within a one month period); (d) workshops - woodwork) no. attendances
metal work) dances
craft) per month.
 - (vi) Per capita consumption of the following four food groups
 - (a) Meat group - fish, meat, beans, ground-nuts, milk, eggs, chicken etc.
 - (b) Cereal group - maize, potatoes, millet, sorghum, cassava, green bananas, bread etc.
 - (c) Vegetable group - all green vegetables, carrots, mchicha (spinach), pumpkins, cabbages, peas, etc.
 - (d) Fruit group - oranges, mangoes, lemon, pawpaws, bananas, pineapples jack-fruits.
 - (vii) Adults keep accurate co-operative shop records.
 - (viii) Each active adult participates (per month) in the maintenance and improvement of (a) own properties, (b) community property.
 - (ix) Each primary school child participates (number of times per month) in the maintenance and improvement of (a) own families property, (b) community property.
3. To assess the extent to which:
 - (i) Each child by standard seven achieves mastery of major objectives in kiswahili, mathematics, social studies and domestic science (or agriculture or crafts).
 - (ii) To assess the extent to which standard seven children possess the following attitudes:
 - (a) value equally all subjects of the curriculum
 - (b) regard primary education as terminal

(c) regard working together (co-operation rather than competition) as desirable. (ii) blue and white collar jobs are regarded with esteem; (iii) remaining in village is a desirable behavior; (iii) self-reliant community work of equal status with urban employment.

Design of Study (including sampling)

In Dodoma there will be 8 CECs in 8 communities. These 8 communities form the target population (and sample) for this study. The study, in its initial plan, will be a cross-sectional survey, and will provide base line data for future comparisons.

In november 1975 one CEC will receive its first intake for each grade. In this Ujamaa village testing will be conducted in september 1976 for adults and Standard Seven children. This information will serve two purposes: (a) the status quo on the several objectives stated above; (b) the identification of specific objectives which are not being achieved to the desired standard; this information will act as feedback to the curriculum center, the teacher colleges, ministry officials etc.

The recipients of the feedback information will, of course, be aware that the children in this CEC will have come from other schools and that the achievement and attitudes may be due more to the other education they have received than to the one year spent in this particular CEC.

A second primary school in the Dodoma area, but which is not a CEC will be chosen (to be as similar as possible in terms of intake and teacher quality) by the Ministry of Education and the Standard Seven children in that school will be administered the same cognitive and attitudinal measures as the CEC children.

A third primary school in an existing Ujamaa Village in the Dodoma area will be selected and the same evaluation conducted as for the second primary school.

Tentatively, a 1 in 10 random sample of the adults in the community in each of the 3 villages will be tested and observed in order to collect the data for the adults' objectives tested above for the community objectives, an observation check list will be completed. The above will provide the base line data for the listed objectives and will be the end of the proposed World Bank Study.

The Tanzania evaluation team (from now on referred to as the TET) involved in the above is recommended to repeat the evaluation using the same measures on future occasions (The number of occasions being determined by resources available). For example, if the full data were collected in each of the next successive 6 years, this would allow an evaluation of the long-term effects of the CEC experiment for the schooling; the seventh time of testing will include in standard 7 those pupils who will have completed all of their primary education in the CEC Seven years is also sufficient time to allow the effects of the CEC experiment to take root in all members of the community.

Instrument Construction

1. Community check-lists.

This will be constructed by a member of the Tanzania evaluation team for specific objectives 1 a-b-c, 2v and 2 vi.

2. Community attitudes.

After discussion between members of the TET and Ujamaa Village adults, the TET will produce 3 sets of attitudinal statements for measures 1d i, ii and iii. These will be pre-tested in another established Ujamaa Village e.g. Kwamsisi, Iringa, scale analyses undertaken and final Likert scales produced. For the administration of the Likert scale, literates will complete it themselves and those unable to do so will have it completed by an observer.

3. Adult literacy and numeracy. (see objective 2: i)

A content analysis will be undertaken of the literacy and numeracy courses in the CEC by the TET and appropriate short tests of reading, writing and arithmetic will be constructed such as to ensure high content validity and reliability.

4. Adult check-list.

The TET will construct check-lists for objectives 2 ii, 2 iii, 2 iv (a, b, c, d) and 2 vii.

5. Adult attitudes. (and preferably the frequency of desired behavioral activities will be recorded for selected adults) will be produced by the TET for 2 iii.

6. Children's check-list.

The TET will construct a check list to measure 2 viii.

7. Children's tests

The TET will, in January 1976, consult with the CEC Standard 7 teacher and produce a blue print of all objectives (whether they emanate from the Ministry of National Education or the village community) for objective 3 i. A weighting (1 - 3 scale) will be accorded to each cell and a sample of all cells weighted 3 will be taken to form the content of the test.

8. Children's attitudes.

Likert scales and job and activity preference questionnaires will be constructed by the TET for objectives 3 ii a, b, c and 1d i.

Data Collection

In June 1976 the above instruments will be finalised and mimeographed in the required numbers.

Test administrators and observers will be trained in August 1976. In September 1976, the TET plus extra administrators will spend some 7 - 10 days in Dodoma collecting the data.

The sample of adults of the target population of pupils have already been identified and the requisite identification codes entered onto all tests, questionnaires, check-lists and opinionnaires.

The data will put onto punched cards, according to the punching and coding schemes devised by the TET in July 1976.

Data Processing

A half-time educational data processor will be attached to the TET Programs will be acquired and modified or developed during 1976 to work on the Dar es Salaam University computer.

All data will be punched and verified in October 1976 by (to be determined). In November, the editing, sorting and filing of data will be undertaken by the TET data processor (at this point

FLOW CHART

Month	Selection of schools	Sampling of adults	Test Construction	Attitude Scale Construction	Questionnaire Construction	Check-list Construction	Printing	Data Collection	Coding, Punching and Data Analysis	Write-up
November 1975	3 Schools selected		Content Analysis	Interviews and Observation	Identification of indepent variables	Identification of action of activities				
December 1975		List of Adults in each community drawn up	↓							
January 1976			Item writing	Identification of statements and behaviors	Pre-test	Pre-test			Development of statistical analyses and computer programme	
February 1976			↓			Revise and				
March 1976			pre-testing	pre-testing	Finalise	finalise	P			Write-up
April 1976			Item analysis	Item analysis			→ R		Coding and Punching Schemes developed	
May 1976			Final Tests	Final Instruments			→ I → N			
June 1976		Draw sample	↓	↓			T			
July 1976							I			
August 1976							N			
September 1976							G	Data collection		
Octobre 1976									↓	
November 1976									Coding and Punching	
December 1976									Univariates, Item Analyses, Bivariates	
January 1977									Multivariates	
February 1977										
March 1977										
April 1977										1 week in meeting in Paris

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working on a full-time basis). The univariates and bivariate will be run in December 1976. In January 1977 Dr. Choppin will visit Dar-es-Salaam for 2 weeks to check on the univariates and bivariate, to run, if necessary, further univariates and bivariate, and to run the necessary covariance and regression analyses for the comparisons involved. At this point the interpretation of the data will begin with the TET.

Write-up

Each section of work will be written in first draft form as it is accomplished.

During 1976, the TET will formulate a preliminary design for the presentation of the results.

The report will be written in English by the end of April 1977. This will require full-time work by the TET during these last months.

BUDGET

This budget is split with Tanzanian and non-Tanzanian costs since it is expected that Drs. Choppin, Pidgeon and Postlethwaite will come in from time to time to help with the project.

Tanzanian costs

Travel and Subsistence

1. Selection of villages and planning sampling frame for adults in Dodoma 2 persons for 5 days each.
2. Pre-testing in Kwamsisi - 2 persons for 3 days each.
3. Field work in Dodoma - 4 persons for 2 weeks.
4. Miscellaneous travel for persons having meetings in Dar es Salaam.
5. 30 days of full time typing.
6. 2 clerks for 3 weeks each for coding.

Salaries

1. One full-time co-ordinator for 18 months.
2. Three half-time researchers (adult, Primary, Teacher Education) for 18 months.

Printing costs

For Adults 300 x 10 pages = 3 K

Children 150 x 20 pages = 3 K

Doubling this number for pre-testing and other administration the total exercise will need:

12,000 sheet paper

60 stencils

450 pencils

Annex 5

Punching

150 children x 3 cards x 80 columns per card = 36,000 characters

300 adults x 2 cards x 60 columns per card = 36,000 characters

Computer

10 hours on ICL 1902 A

1 man-week of expert help at computer centre.

ANNEX 6

THE LEARNING OF KISWAHILI IN STANDARDS 1 AND 2 IN TANZANIAN PRIMARY SCHOOLS

A. Hauli
G. Mizambwa
L. Masota
W. Bavu
M. Chipa

Reasons of the study

In the Tanzanian education policy, primary education aims at giving knowledge, skills and attitudes which will enable the primary school leaver to be a useful citizen in the community. One of the most important skills is reading and writing of Kiswahili. It has happened already that even after the introduction of the new materials and new ways of teaching, a percentage among the primary school leavers does not acquire the skills of reading and writing in Kiswahili as indicated in the inspectors' reports and public opinion from the press.

A. General objectives

1. To identify factors affecting achievement in reading, writing Kiswahili in standard two of the primary school.
2. From the analysis to identify those factors which are most likely to improve the learning of writing and reading of Kiswahili in standard I and II.

B. Specific objectives

To measure the following independent variables for each class in the study:

I. The school: (i) location, (a) urban, (b) rural; (ii) size, (a) one stream, (b) two streams, (c) three streams, (d) more than three streams - specify; (iii) organization and classroom, (a) number of hours allocated to Kiswahili per week, (b) size of class: 30-35, 35-40, 40-45, 45-50, 50-55, others - specify, (c) amount of practice received in writing Kiswahili.

II. The teacher: (i) sex, (a) male, (b) female; (ii) length of service; (iii) years of teaching reading and writing Kiswahili in standards I and II; (iv) in-service courses attended on the teaching of reading and writing Kiswahili for the last two years; (v) methods used in teaching reading and writing in standard I; (vi) duration of professional training received; (vii) training received in teaching reading and writing Kiswahili in standards I and II; (viii) professional certificates awarded; (ix) attitude of the teacher towards the teaching of reading and writing Kiswahili in standards I and II and to each child.

III. Teaching materials: Availability of: (a) class readers; (b) supplementary readers; (c) picture cards; (d) word cards; (e) flannel board; (f) sheets for card-making; (g) others - specify.

IV. The learner: (i) sex, (a) male, (b) female; (ii) age; (iii) exposure to Kiswahili before starting

school. To measure the following dependant variables for each child in the study: (iv) ability to match pictures and words: given a set of two pictures and five word cards, the pupil should be able to match all the pictures with the appropriate word card; (v) ability to build words from syllables: given six different syllables the pupil should be able to build at least four meaningful words; (vi) ability to follow oral instruction: the pupil should be able to follow correctly oral instruction containing three to eight words; (vii) ability to answer reading comprehension questions: from a passage of 15 to 20 words, the pupil should be able to answer at least three out of five questions based on the same passage; (viii) ability to write his/her name: the pupil should be able to write his/her name; (ix) (a) ability to copy words and sentences: given five words varying from two to six syllables, the pupil should be able to rewrite all the words; (b) given a sentence of five words, the pupil should be able to rewrite the same sentence; (x) ability to write names of objects shown to him/her: given a set of five objects/pictures, the pupil should be able to write the names of all the respective objects or pictures; (xi) ability to complete sentences with reference to information given in a picture: given a picture with four or five specific elements the pupil should be able to use the information from the picture to complete three sentences using two to four words.

TARGET POPULATION AND SAMPLING

(a) Target population. The pupils for the study will be those of standard II of the primary school.

(b) (i) Sampling. Since there are over 5,000 primary schools in the country, which is divided into 20 regions, it is proposed to take a representative sample of six schools from every region.

(ii) Sampling procedure. The procedure to be followed in selecting the six schools in every region is summarized as follows:

Category		Location	
		Urban	Rural
A	A large school with a large class	1	1
B	A large school with a small class	1	1
C	A small school	1	1

A large school will mean a school with more than one stream, and a large class will mean a class with more than 45 pupils. A small school will mean a school with a single stream, and a small class will mean a class with less than 45 pupils.

All schools within the boundaries of towns will be regarded as urban schools, and those outside will be rural schools.

Education authorities in every region will follow the procedure given below in selecting the six schools:

- (i) Names of the schools in each category and location will be written on pieces of paper.
- (ii) For categories A and B the classes will be selected by picking from a basket or a hat.
- (iii) The classes for category C will be those of the schools selected.
- (iv) The selection of pupils for the actual study will be done at random in the ratio of one to three as they appear in their respective class attendance registers.

DATA COLLECTION

Instruments	Variables	How information is collected	When information is to be collected
A. Questionnaires will be constructed	For items: I (iii) a II (viii) IV (iii) all independent variables	Questionnaires will be posted to school inspectors, who will deliver, administer then collect them from the teachers in his/her third visit.	September 1976
B. Interviews and observations	For items: I (i) a & b, (ii) a-d (iii) b & c II (i) a & b, (ii), (iii), (iv), (v), (vi), (vii) III a-g IV a & b, (ii)	Inspectors will visit the same schools on three occasions to administer the interviews and observations. The data in the inspectors' report will be based on observation of three lessons.	September 1976
C. Attitude scale	For item: II (ix)	Inspectors will give these attitude scales tests to the class teacher and collect them on the third visit.	September 1976
D. Tests	For item: IV (iv)-(xi)	The tests will be administered by college tutors and students and inspectors. These will be trained by the evaluation team through zonal seminars. Three will be assigned to administer tests in each class.	September 1976

Design of study

As indicated in the sample and target population, the inspectors in every region will be selected and then briefed on the importance and reasons of the study. Thereafter they will carry out a study survey on six selected schools during the month of November 1975. From this date onwards the inspectors will be involved in the initial stages of evaluation as indicated in the flow chart until September 1976 when the instruments will be administered and data collected. The data will then be forwarded to the Director, Institute of Education, for processing.

The schools involved in the study fall under three categories:

- (i) a large school with a large class;
- (ii) a large school with a small class;
- (iii) a small school.

The sampling procedures show that three schools will be selected from rural and three others from urban areas. This will give a total number of 120 schools in which a random selection of primary two children will be made in the ratio of 1 in 3, thereby making a total of 2,000 children. (The total number of children in every class ranges from 45-50.) Although the study is based on primary two, constant reference will have to be made on subject-matter taught in primary one to identify whether or not the methods used, whole word - phonic method and vice versa, are effective.

Data analysis

The following procedure will be carried out for the analysis of data:

- (i) Achievement scores in reading and writing between schools will be used in calculating the means and standard deviations.
- (ii) Correlation coefficients on the scores and the independent variables will be computed.
- (iii) Correlation between independent achievement scores will be computed.
- (iv) Multiple regression will finally be done using a computer to find out which independent variables are significant on the achievements.

CostsA. Travel and subsistence allowances

- 1. Selection of schools and pupils - two persons for five days per region.
- 2. Pre-testing in two schools in Dar es Salaam and coast regions - four persons for two days.
- 3. Field work in the regions - one person for 15 days in five regions (four people).
- 4. Miscellaneous travel expenses for persons attending meetings for 15 people for ten days.

B. Salaries

- 1. Co-ordinator; full time, 16 months.
- 2. Two part-time researchers for ten months.

C. Printing costs

- For teacher - 10 x 120 sheets
- For pupils - 2 x 2,000 sheets
- 2 x 2,000 pictures
- 4 x 2,000 cards (words)
- 6 x 2,000 cards (syllables)

	1975 November	December	1976 January	February	March	April	May	June	July	August	September	October	November	December	1977 January	February
Sampling	120 schools from 20 regions										DATA COLLECTION					
Test construction	Communi- cation with regions teachers and colleges	Content analysis	Item writing		Pre- testing	Item analysis	Final test and revision									
Attitude scales			Item writing		Pre- testing	Item analysis	Final test and revision									
Questionnaire construction			Item writing		Pre- testing	Item analysis	Final test and revision									
Check-list construction			Item writing													
Printing																
Data collection																
Coding, punching and data analysis																
Interview and observation construction		Identifi- cation of state- ments and behaviour	Item writing													
Write-up																

Seminar for test
administration zonally

Printing

ANALYSIS

Write-
up

Typing time - 30 days:

- (i) Manpower for typing - 2
- (ii) Manpower for coding - 4 weeks each
- (iii) Card and picture making - 30 days.

D. Punching

$33 \times 2,000 = 66,000$ characters

E. Coding

$50 \times 120 = 6,000$ characters

F. Computer

1 - 2 hours computer work.

G. Report writing

$200 \times 500 = 100,000$ copies.

ANNEX 7

ECONOMIC ACHIEVEMENTS OF EDUCATION FOR SELF-RELIANCE IN SECONDARY SCHOOLS

A. Lema
I. E. Nkya
B. Katigula
C. M. Gunze
J. U. Mwasendwa

The importance of the Project

Education for Self-Reliance policy was proclaimed and adopted in 1967. Among other objectives schools are required to launch economic projects to enable them to contribute towards their upkeep. Work is to become an integral part of education to cultivate positive attitudes towards manual work. Teachers and pupils are to work together to achieve this goal.

There has been neither formative nor summative evaluation to assess the economic or the affective objectives. This is true of the curriculum aspects also. All these areas are in need of review. It is our intention to begin the exercise by evaluating the former aspects first so as to narrow the task to manageable proportions.

The findings will be important for schools and the government to enhance improvement in the system.

Overall Objective

To determine the extent to which schools have contributed to their running costs.

General Objectives

1. To enumerate the various economic activities actually carried out by the schools between January 1970 and December 1975.
2. To estimate the average per pupil earnings (in shillings) over the period 1970-1975 for each school.
3. To estimate the relative importance of selected factors associated with the earning of the variations between schools, if any, in 1975.
4. To find out factors contributing to attitude differences between schools in 1975.

Specific Objectives

1. To measure the attitudes of 1975 pupils towards willingness to work in economic activities in the school.
2. To measure all teachers' attitudes towards working in economic activities in the school in 1975.
3. To measure the attitudes of the ancillary staff of the selected schools towards working in economic activities in the school.
4. To calculate the land/pupil area ratio.

5. To estimate the degree of suitability/unsuitability of the soil for crop production.
6. To calculate the number of times each of the selected schools has sought technical advice on relevant item from the following list in 1975 (between January and December):

- (a) gardening;
- (b) cash crops;
- (c) food crops;
- (d) poultry keeping;
- (e) bee keeping;
- (f) pig rearing;
- (g) fishing;
- (h) dairy farming;
- (i) sheep/goats keeping;
- (j) brick laying;
- (k) house constructing;
- (l) any other economic activity - specify.

7. To calculate an index of the resources (tools and materials) available in the selected schools:

- (i) the number of hoes per pupil;
- (ii) rakes available;
- (iii) watering cans per hectare;
- (iv) hose pipes per hectare;
- (v) spades per school population;
- (vi) spraying pumps;
- (vii) insecticides in grams or litre;
- (viii) fertilizers in kgs or tons;
- (ix) ox-ploughs;
- (x) manure - specify quantity used;
- (xi) tractor(s);
- (xii) draft animals (oxen, donkeys etc);
- (xiii) karais;
- (xiv) any other tools/materials used.

Sampling

A probability sample of secondary schools and pupils within schools will be drawn.

The grouping will be done by judgement sampling. From each stratum a sample of 1 in 3 schools will be drawn. Our stratifiers will be :

- Urban - Rural;
- Boys - Girls - Mixed;
- Public - Private;
- Large - Medium - Small.

The sampling frame will be as on following page.

In our sample population of forms 2, 4 and 6 pupils in the selected schools we shall take a sub-sample of 1 in 4 pupils within each school depending on the size of the chosen schools' population.

Design

1. In October 1975 pupils in forms 2, 4 and 6 in the selected schools will be tested for their attitudes (see specific objective 1 above).

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POPULATION

SAMPLE

	Stratifiers	Schools	Pupils	Schools	Pupils
Boys	Public				
	Private				
U Girls	Public				
	Private				
Mixed	Public				
	Private				
Boys	Public				
	Private				
R Girls	Public				
	Private				
Mixed	Public				
	Private				

2. All teachers in the selected schools will be tested for their attitudes (specific objective 2 above).
3. All ancillary personnel in the selected schools will be tested for their attitudes (specific objective 3 above).
4. In January 1976 all secondary school heads will be requested to complete check lists (general objectives 1 and 2; specific objectives 4, 5, 6, 7).
5. These criterion data will give the variance between schools on school earnings.
6. The criterion will be regressed on to the independent variables enumerated below to establish the relative importance of each independent variable.
7. In the preliminary preparation of attitude scales for pupils, teachers, as well as ancillary staff a cross-validation exercise will be conducted to establish validity of scales versus observation schedules methods.

AVERAGE ECONOMIC PRODUCTION 1970-1975

Year	Total earnings Shs	Total No. of Pupils
1970		
1971		
1972		
1973		
1974		
1975		
Total		
Mean.	47	

$$\frac{\text{Mean earnings}}{\text{Mean pupils}} = \text{Average earning per pupil.}$$

Variables

Dependent Variable 1

Economic production in schools in shillings per pupil between January 1970 and December 1975.

- (a) Add up the total output for the 6 years and compute the mean, to average out annual variations due to weather and other factors.
- (b) Add up the total pupil enrolment in each school during the 6 years and calculate the mean.
- (c) Divide (a) by (b) to get shillings per pupil.

Independent Variables

- (a) Willingness of pupils towards working in the schools self-reliance activities (see specific objective No. 1).
- (b) Willingness of teachers towards taking part in the schools economic activities (see specific objective No. 2).
- (c) The support of the principle of having economic projects in schools by the ancillary staff (see specific objective No. 3).
- (d) The size of available arable land in hectares per pupil in each school (see specific objective No. 4).
- (e) Degree of suitability of land for crop production as assessed by independent specialists rated in three categories: 1, 2, 3; 1 for poor soil; 2 for good soil and 3 for best soil (see specific objective No. 5).
- (f) Number of times the selected schools have sought technical advice on relevant items in 1975 (see specific objective No. 6).
- (g) Availability of resources (see specific objective No. 7).

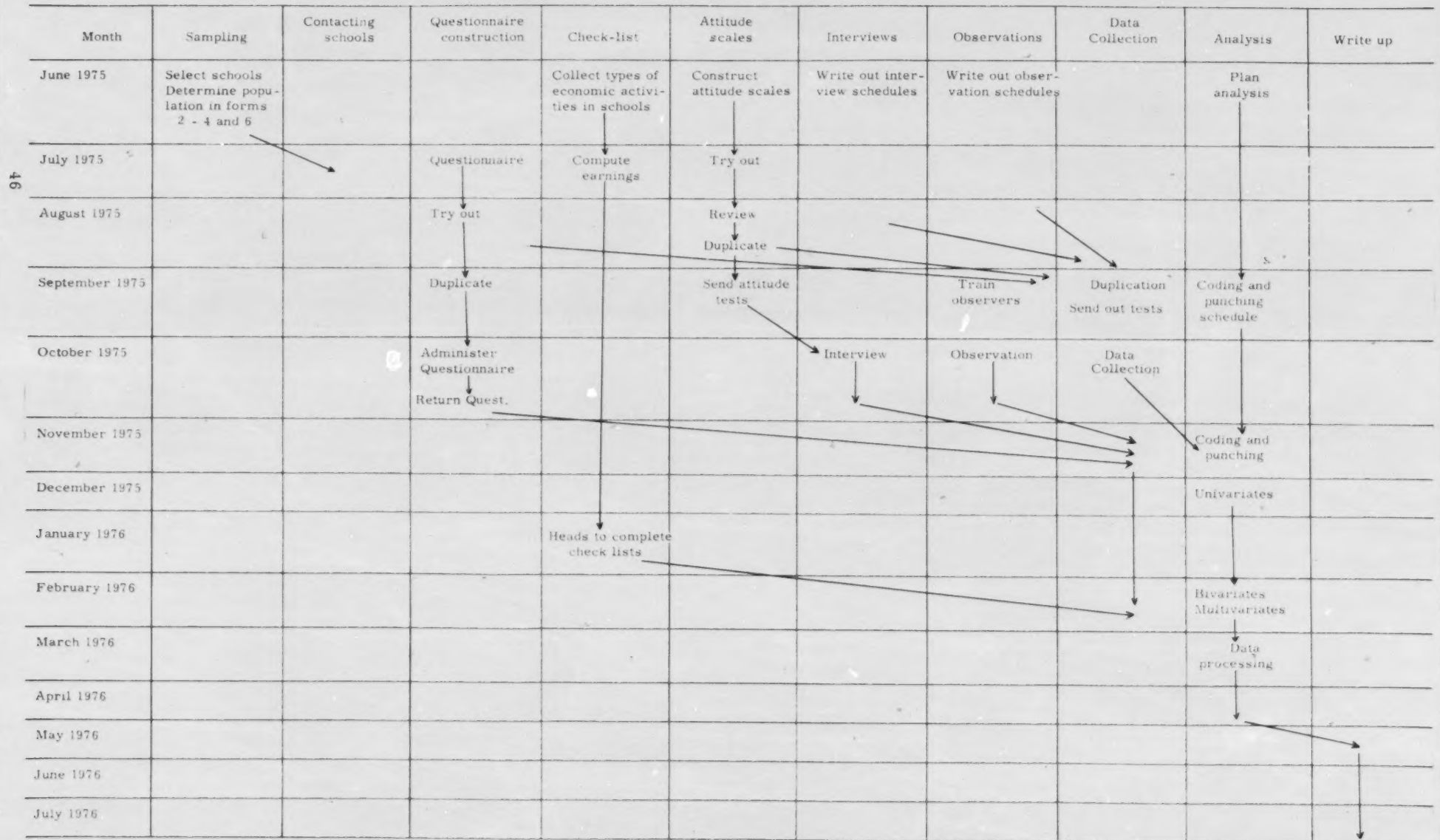
Dependent Variable 2

Attitude differences between schools towards economic production. This refers to the three groups mentioned earlier (see specific objective No. 1).

Independent Variables

1. Degree of politicisation of pupils as indicated by:
 - (a) Functional presence of TANU Youth League branch in the school.
 - (b) Participation in adult education classes.
 - (c) Participation in national festivals - processions and cultural activities.
 - (d) Visits and talks to school by local/District/Regional TANU leaders.
2. Degree of politicisation of teachers by:
 - (a) Presence of active TANU branch in the school.
 - (b) TANU membership.
 - (c) Socialist activities - co-operative undertaking (any).
 - (d) Contributions to national fund raising activities.
 - (e) Participation in self-reliance activities - frequency.
 - (f) Participation in local TANU activities by the staff including the head.
3. Degree of politicisation of ancillary staff by:
 - (a) Membership in school TANU branch.
 - (b) Participation in ujamaa activities - e.g. co-operative shops.

FLOW CHART



- (c) Contributions to National Fund raising activities.
 - (d) Participation in local TANU activities
4. Type of school organization:
- (a) Democratic leadership as evidenced by:
 - (i) Frequency of staff-meetings
 - (ii) Two way process in decision making - Headmaster vs staff;
staff vs pupils and student leaders vs fellow pupils.
 - (b) Participation of pupils in running self-reliance projects by presence of working committee(s) with student elected representatives.

INSTRUMENT CONSTRUCTION

A. SCHOOL CHECK LIST

This instrument will be used to collect: (1) School earnings; (2) Arable land; (3) Technical advice; (4) Resources

B. PUPILS QUESTIONNAIRE

This will consist of three sections: (1) Political activities of pupils; (2) School organization; (3) Attitude scale of statements on pupils willingness to work on self-reliance activities. A preference scale of positive and weighted 0, 1, 2, 3 statements will be constructed. Judges will rate them.

C. TEACHING STAFF QUESTIONNAIRE

Various types of information will be obtained: (1) Political activities of staff; (2) School organization; (3) Attitude scale for teachers attitudes towards working in economic activities. A preference scale of positive statements weighted and pre-tested for validity will be used.

D. ANCILLARY STAFF QUESTIONNAIRE

This will supply: (1) Information on political activities of ancillary staff; (2) Ancillary staffs attitudes towards economic activities in schools constructed as for B. 3 and C. 3 above.

5. Rating Scale: Suitability of agricultural land in schools:
- The scale will have three levels of suitability/unsuitability:
- Good _____ Average _____ Poor _____
- Ratings will be done by an independent agricultural specialist.

Data collection

In September 1975 the instruments above will be sent or taken to schools for completion. In the same month the completed instruments will be collected. In October 1975 the instruments will be finalised. The coding and punching will be done in February 1976.

Data analysis

Univariates will be calculated on each variable to find out the mean and for each school. The criterion data will be regressed on to the independent variables listed above to determine the relative importance of each independent variable. This will be done sometime during February and March 1976. At this time the team will start to interpret the data.

Write-up

The write-up will be carried out stage by stage as the team proceeds accordingly. The work will begin some time in May 1976.

Full report will be ready by July 1976.

BUDGET

1. Observations

Boarding: 2 x 10 at Shs. 140 = Shs. 2,280

Fare: Shs. 50 x 5 = Shs. 250

2. Try out

Boarding: 5 x 5 = 25 x 140 = Shs. 3,500

Fare: 200 x 5 = Shs. 1,000

3. Administration of questionnaire

Boarding: 15 x 5 x 140 = Shs. 1,050

Fare: 400 x 5 = Shs. 2,000

4. Mailing

For parcels despatching check lists, questionnaires, etc.

Costs included in office costs.

5. Stationery

Duplicating paper.

Teaching and ancillary staff: 50 x 40 x 2 x 10 = 40,000 pages

(30) (20) = 400 reams

(2,400 x 2) 10 = 48,000 pages

50,000

= 500 reams.

Stencils: 300

6. Computerization

Analysis: 6 hours x 360 = Shs. 2,160

Punching

Number of characters 36 x 40 = Shs. 1,440

(one card for each school).

Number of punching cards:

2,400 pupils + 2,000 teaching = 5,000 x Shs. 2 = Shs. 10,000

& Ancillary staff

Coding scheme for schools

NB - We shall have a coding scheme each for:

- (a) Staff;
- (b) Pupils;
- (c) Ancillary staff.

Column	Variable	Coding
1 - 2	School numbers	01 - 40
3	Type: Urban Rural	Urban = 1 Rural = 2
4	Public Private	Public = 1 Private = 2
5	Mixed or Sab Sex	Mixed = 1 Sb, 6 Sex 2
6	Boys, Girls or Mixed	Boys = 1 Girls = 2 Mixed = 3
7 - 10	Productivity	Number of skilling/pupil
11 - 14	Arable land	Square metres/pupil
15 - 16	Technical advice	Number of times
17 - 19	Resources	Number of resources
20 - 21	Political activities (pupils)	Number of points
22 - 23	School organization (pupils)	Number of points
24 - 25	Pupils attitudes	Number of scores
26 - 27	Political activities of staff	Number of points
28 - 29	School organization (staff)	Number of points
30 - 31	Staff attitudes	Number of scores
32	Suitability of land	Points 1 - 3
33 - 34	Political activities Ancillary staff	Number of points
35 - 36	Attitudes on economic activities	Number of scores

OUTLINE OF INSTRUMENTS - SCHOOLS CHECK LIST

Name of school:

A. School earnings

		Earnings in Shs. T.						
		1970	1971	1972	1973	1974	1975	Total
Activity								
1								
2								
3								
4								
5								
6 etc.								
Totals								
Pupil enrolment								

B. Arable land

		1970	1971	1972	1973	1975
Area of land under cultivation in hectares						
Enrolment in average per pupil in square metres/pupil						

C. Technical advice sought in 1975

<u>Month</u>	<u>Frequency</u>
January	
February	
...	
December	
Total	----- X

D. Resources available in school

	<u>Type of resource</u>	<u>Quantity available or used</u>
1.	Hoes	
2.	Rakes	
3.	Watering cans	
4.	Hose pipes	
5.	Spades	
6.	Spray pumps	
7.	Insecticides in gm/or litres	
8.	Fertilizers in gm	
9.	Ox-ploughs	
10.	Manure	
11.	Tractors	
12.	Draft animals	
13.	Karais	
14.	Land available in hectares/pupil	
15.	Others	

PUPILS QUESTIONNAIRE

I. Political activities - 1975Yes/No
or number

1. Membership of TYL.
2. Number of activities organized by TYL in the year.
3. Number you have taken part in among (2).
4. Number of times participated in adult education classes.
5. Number of times participated in festival processions.
6. Number of times participated in cultural activities.
7. Number of times attended talks by local TANU leaders.

II. School organization (by pupils)Either:

- A.
 - (a) We have a committee dealing with self-reliance activities in which pupils send elected representatives.
 - (b) The self-reliance committee is involved in planning self-reliance activities.
 - (c) The committee is consulted on how to use the proceeds from the activities.

Or:

- (d) The headmaster and staff alone decide the activities for Ed, for self-reliance.
- B. The headmaster and staff alone decide the activities for Ed, for self-reliance.
- C. We have regular meetings with our housemaster in our house.

III. Economic projects in the school (preference scale)

Preference Scale

Pupils

- (a) I like working on the farm because I have company there.
- (b) I like working on the farm because I enjoy it.
- (c) I like spending my spare time in shamba.
- (d) I work hard in the field to get a point for my house.
- (e) I like looking after (chicken) cows in the school.
- (g) I go to shamba so that I could get a good report at the end of the year.
- (h) I don't mind going into shamba provided I am allowed to do what I like to do.
- (i) I like gardening as a hobby.
- (j) I would not mind doing gardening if it earns me money.
- (k) I would not mind doing shamba work if it earns the school money.
- (l) I like going to shamba because it gives me good exercise.
- (m) If I could chose I would spend more time in the garden.
- (n) If I could chose I would do more interesting things than arming.
- (o) I came to school to study and not to do shamba work.
- (p) I am interested working in the shamba because the teachers accompany us.
- (q) I would enjoy working in shamba if it demanded less time.
- (r) I work hard in the shamba because the teacher works hard too.
- (s) I would like to do building work to save the school money.
I would have been more keen to work in the shamba if we had taken part in making the decision.
- (t) I like keeping my own working tools under my bed.

TEACHING STAFF QUESTIONNAIRE

- I. Political activities.
- II. School organization.
- III. Economic activities.

Political activities (of members of staff)

- 1. Presence of school TANU branch.
- 2. Membership of TANU.
- 3. Number of activities organized by school TANU branch.
- 4. Number of activities taken part.
- 5. Contributions to TANU organized Fund raising.
- 6. Presence of school Co-operative shop.
- 7. Membership to a consumer co-operative shop.
- 8. Number of times participated in self-reliance activities.
- 9. Membership in local political organizations.

School organization

1. Frequency of staff meetings (one month).
2. Check if any of the following are correct.

For the official agenda normally circulated before staff meeting:

- (1) Agendas always come from the headmaster and staff bring up theirs under A. O. B.
- (2) Staff suggest some of the agendas before staff meeting.

Preference scale: attitudes of staff towards economic projects in schools

1. Supervision of self-reliance projects should be carried out by specialist staff.
2. I would enjoy participating in self-reliance projects if my teaching load was reduced.
3. I would enjoy participating in self-reliance projects if teachers also shared the proceeds from the projects.
4. I would enjoy working in the self-reliance projects if teaching was my own choice.
5. I find relaxation in self-reliance projects after a day's mental work.
6. I work hard in the school shambas to earn good marks for my house.

ANNEX 8

AN EVALUATION OF THE EFFECTIVENESS OF RURAL LIBRARIES IN RETAINING PERMANENT LITERACY IN TANZANIA

B.A.P. Mahai, Chairman
R.B. Mpungu
M. Kimambo

INTRODUCTION

Since the beginning of our independence TANU had seen the importance of the eradication of illiteracy in our country. In his independence message to TANU Ndugu Mwalimu Nyerere had stated clearly the need to eradicate illiteracy as follows:

'All the time that TANU has been campaigning for UHURU we have based our struggle on your belief in the equality and dignity of all mankind and on the Declaration of Human Rights. We have agreed that our nation shall be a nation of free citizens, each person having an equal right and opportunity to develop himself, and contribute to the development of our Society. We have said that neither race nor tribe nor religion nor cleverness, nor anything else, could take away from a man his own rights as an equal member of society. This is what we have now to put into practice. Yet we know that on the 9 December 1961, shall have not achieved these objectives. Poverty, ignorance and disease must be overcome before we can really establish in this country the sort of society we have been dreaming of.'

The establishment of rural libraries for the literacy graduates in order to retain their permanent literacy is therefore obvious. This became operative since 1973 when a few rural libraries were established in the districts and the long term objective of the government is also to have a library in every village. This will therefore cost the nation a lot of money. In order to justify the expenses incurred by the nation and that the objectives of establishing rural libraries are met, there is a need to establish an appropriate machinery for formative and summative evaluation. The first attempt of its kind to evaluate this huge but important project is to become feasible and operative as it will be seen in the rest of this paper. It will be seen that the project is to commence soon in August of this year and is to take us a period of one and half years to be able to finalize and publish the results of the research findings.

General objectives

1. To find out whether people read books in these Libraries.
2. To see if these books promote literacy.
3. To see if knowledge gained through reading, writing and arithmetic is applied to solve practical problems.

Specific Objectives

1. Reading

- (i) To be able to read and understand a short and meaningful paragraph
- (ii) To be able to answer oral questions from the paragraph he has read.

2. Writing

- (i) To be able to answer in writing a few comprehensive questions from the paragraph previously read (to check writing skills and understanding)

3. Arithmetic

- (i) A literate adult should be able to do simple calculations such as adding and subtracting sums with three digits. He should be able to multiply a number with two digits and also to be able to divide a number with one to two digits.

Target Population

All literacy graduates from literacy class held in 1975.

Design

All the names of adult literacy graduates from three regions shall be collected, representing areas of high, middle and low literacy. High literacy means that of the total population about 75 per cent are literates, 50 per cent for middle and 25 per cent for low. In each region we will take an equal number of ten libraries. These will be allocated to the districts. Take for example Kilimanjaro Region which has three districts that is to say two districts will have three libraries to be studied and one district will have four libraries taken for the study. In each library forty people will be chosen. Therefore the district with three libraries will have 120 people and the one with four libraries will have 160 people. Dodoma Region has three districts thus the sample will be as in Kilimanjaro Region. Pwani Region has four districts. Therefore we will take one library in Mafia and the rest we will take three libraries. Mafia will therefore have 40 people and the rest of the districts will have 120 people.

Administrators in each District

There will be one district adult education co-ordinator plus a librarian for each library.

In each library we shall take 40 adult literacy graduates. We shall take whenever possible equal number of sex e.g. 50 per cent of each sex. Another possibility will be, if it happens one group of the opposite sex has more people in that library we shall take more of the large number to complete our number of 40 persons.

Instruments

Pre-tests will be administered to the selected literates graduating in August, 1975. All the names of these pre-tested candidates will be listed on cards which will be put in the concerned libraries for check up. The librarians will have names in a check list where he will have to tick the attendance in the library.

Questionnaire

A questionnaire will be constructed and administered to collect information on reading, writing, arithmetic and background informations of the adult literates about their age, sex, occupation

and religion. A pilot survey will be carried to pre-test the questionnaire which will also include content and item analysis. These will then be finalized and duplicated for testing. These questionnaires will be forwarded to the District Adult Education Co-ordinators who will work in collaboration with the librarians from the selected libraries. These will be collected and forwarded to the Ministry of National Education for the evaluating team to process, analyze the data and write the final report.

Variables through which data will be collected by questionnaire. These questionnaires will be constructed by us and mailed to the district adult education co-ordinators.

1. A question to find out the extent to which the swahili language is used as first or second language.
2. The number of hours spent reading newspapers every week and the type of papers mostly read.
3. The number of hours spent listening to radio programmes every week.
4. The type of books mostly liked by adults.
5. The number of miles he has to walk to the library.
6. Factors affecting his writing and reading rate and whether his physical fitness such as hearing and eye-sight has any effect on his progress.
7. Factors affecting the library attendance during the performance of cultural activities.
8. Attitude question to find out what stimulates his motives to read, write and count.
9. Attitude question to discover his new expectation from what he has acquired through reading and writing.

Variables through which data will be collected by observation.

1. The extent to which the adult learner is exposed to writing material.
2. The number of hours through which the library is operating per week.
3. The amount of equipment supplied and the space provided for library users.

Variables from which data will be collected through the study of documents:

1. The enrolments and drop-outs of the adult literacy graduates (by use of the check list for attendance).
2. The monthly average attendance.
3. The different types of books displayed in the library for the promotion of adult literacy.
4. The amount of publicity about the establishment of the library.

Data Analysis

Two sorts of analysis will be employed :

1. For each adult we shall have to calculate the mean, standard deviation and correlations in each of his scores of the dependent variables - reading, writing and arithmetic mean scores with independent variables such as library attendance and distance.
2. For each library we shall find out the regressions of the reading scores as apposed to the space, age and equipment of in various libraries of the three regions. We shall also use the

FLOW CHART

Date	Sampling	Contact Libraries	Questionnaire construction		Test construction	Data collection	Data analysis	Write up
			Library	Student				
May 1975	Produce sample Frame		Schedule Form Attendance	Questionnaire	Content analysis		Plan analysis	
June			Pre-testing		Production of the first draft			
July			Finalize Schedule		Try-out Item analysis			
August			Duplicate	Pre-test	Finalize test		Programming	
September				Finalize	Duplicate			
October				Duplicate				
November								
December								
January 1976						Send out Tests		
February								
March								
April							Scoring Punching Data Processing	Final support

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Annex 8

scatter plot to compare a dependent variable with independent variables. Also analysis of variance shall be used to compare regions.

Budget

1. Travel and Subsistence

There will be three travels to and fro the selected areas for three people. The purpose of these travels are for :

- (i) Contacting the officials and the literacy graduates in the rural areas concerning the evaluation in general
 - (ii) Travel to hold meetings with the district adult education co-ordinators and the librarians of the selected libraries to discuss with them on the whole process of evaluation, especially on the role they will play in the process of evaluation.
 - (iii) Travel to see the process of check list.
- About Sh. 5, 300 will be needed for travelling.

2. Printing Costs

- (i) About 60 reams of paper will be needed.
- (ii) About stencils will be needed.
- (iii) 5 tubes of duplicating ink.
- (iv) 2, 000 pencils will be needed.
- (v) Envelopes 200 - large size
- (vi) Stamps 200 - Sh.400

Data Analysis

- 1. About 3,600 punched cards will be required.
- 2. Six hours of computer time (ICL).
- 3. One week computer experts.

ANNEX 9

THE EVALUATION OF TEACHER EDUCATION CURRICULUM WITH SPECIAL REFERENCE TO THE SKILLS AND ATTITUDES DEMANDED FOR THE COMMUNITY EDUCATION IN TANZANIA

J. S. Meena
G. Shayo
P. D. Komba
E. E. Moshi
M. Sanya

Reason for project

Community education calls for a new cadre of teachers who can lead children and adults towards the national philosophy and policy of Ujamaa and self-reliance as expressed in the Education for Self-Reliance booklet of 1967 by Mwalimu Julius K. Nyerere, the President of Tanzania.

The President has emphasized that "It is they, the teachers at work and now going through training college who are shaping what Tanzania will become much more than we who pass laws, make rules, and make speeches".

Education for Self-Reliance has stressed that the object of teaching must be the provision of knowledge, skills and attitudes which will serve the student when he or she lives and works in a developing and changing socialist State in which every teacher shall recognize the code of professional conduct that he has certain responsibilities to: (i) the child under his or her care; (ii) the community in which he lives and works; (iii) his or her profession; (iv) his or her employer - Ministry of National Education; (v) the State - Tanzania.

It is further stipulated in Education for Self-Reliance that teachers, workers and pupils together in a school must be members of a social unit in the same way as parents, relatives and children are the family social unit. There must be the same kind of relationship between pupils and teachers within the school community as between children and parents in the village so that education will help students to acquire knowledge, skills and attitudes which will foster the social goals of living together, and working together for the common good. Education has to prepare young people to play a dynamic and constructive part in the development of a society in which all members share fairly in the good or bad fortune of the group, and in which progress is measured in terms of human well-being and not in things owned. Tanzania therefore must inculcate a sense of education commitment to the total community and help the pupils to accept the values appropriate to the kind of future the nation is striving for.

In order to ascertain that the teachers going through the training colleges are well prepared in teaching skills and attitudes demanded by community education as expressed above and practise them after graduating it is essential that formative and summative evaluation is established in the teacher education programme.

GENERAL OBJECTIVES

1. To define desirable teaching skills and attitudes to be attained by teachers during their training so as to prepare them for community education.
2. To find out the extent to which these skills and attitudes are covered by the present teacher education curriculum (a) on paper, (b) in practice.
3. To find out the extent to which the teachers (a) attain the attitudes at the end of the college course and retain them at the end of their first year, (b) demonstrate the teaching skills towards the end of their first year.
4. To determine attitudes of tutors to community education.
5. To produce information for preparing a modified teacher education curriculum for community education.

SPECIFIC OBJECTIVES

The main changes in teacher training curriculum demanded by community education are in the teaching skills and attitudes. Therefore the study is confined to these aspects of training and does not cover knowledge of the various subjects.

The following desirable teaching skills and attitudes have been derived from the Ujamaa and self-reliance philosophy as contained in Education for Self-Reliance, the Ministry of National Education proposals for the community education centres of November 1973, the Programme for Grade A Teacher Education, 1969, the MTUU Evaluation Report, 1974.

Desirable teaching skills

At the end of the course, the new teacher will have:

- ability to manage learning in a whole class
- ability to manage learning in groups
- ability to manage learning individually
- ability to ask appropriate questions
- ability to make pupils ask questions
- ability to use teaching aids
- ability to plan logical sequence of learning
- ability to make pupils responsible for their own learning
- ability to make and improvise teaching aids
- ability to make pupils develop a co-operative spirit in the classroom
- ability to communicate at different levels
- ability to monitor pupils' progress
- ability to monitor own effectiveness
- ability to adapt materials to be relevant to the environment
- ability to relate classroom learning to productive work.

DESIRABLE ATTITUDES

At the end of the course, the new teacher will:

1. Have respect for (i) the nation (party, constitution (laws), government, philosophy, symbols), (ii) the natural environment, (iii) property (personal and public), (iv) acceptable values and customs, (v) the teaching profession, (vi) other work.

2. Be responsible for (i) keeping a promise, (ii) being punctual, (iii) not making a promise when he or she knows it will be impossible to fulfil it, (iv) doing his or her fair share of work, (v) having sound judgement, (vi) being initiative, (vii) planning his duties carefully.
3. Co-operate with (i) plans of other (teachers, villagers), (ii) team learning in class, (iii) community games, work and projects, (iv) school committees, (v) tasks assigned to him or her, (vi) others by sharing knowledge, experience and property.
4. Have the following characteristics: (i) practice human equality regardless of social background, creed, colour, nationality or sex, (ii) treats all people according to their needs and rights.
5. Show self confidence by (i) initiating new ideas and projects, (ii) volunteering, (iii) being ready to confront new situations, (iv) trying to solve problems before asking for help.

COVERAGE OF TEACHING SKILLS IN THE SYLLABUS

Content analysis of the present teacher education syllabus.

Using the grid below the contribution of each item on the syllabus to the desirable skills and attitudes will be judged by the curriculum developers of the Institute of Education. The final analysis will be arrived at through the consensus of independent judgements of the developers.

Desirable skills		Where covered in the written syllabus				
A	1					
	2					
	3					
	4					
	5					
	6					
	7					
	8					
	9					
	10					
	11					
	12					
	13					
	14					
	15					
	16					

COVERAGE OF TEACHING SKILLS IN PRACTICE IN COLLEGE

The extent to which the desirable teaching skills are considered by students and tutors to be covered during the college training will be arrived at by asking students, tutors and principals to rate the coverage of each skill using rating scale such as the following:

Desirable teaching skills	well covered	fairly well covered	covered	slightly covered	not covered
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					

DESIRABLE ATTITUDES

(a) Coverage of attitudes in the current syllabus. Content analysis of the present teacher education syllabus.

The teacher education curriculum developers will judge independently the coverage of the desirable attitudes in the syllabus by filling a grid such as the one below. A final analysis will be made by the evaluators (refer to pages 60 and 61 for the description of attitudes).

Desirable attitudes	Where found in the written syllabus
1. (i)	
(ii)	
(iii)	
(iv)	
(v)	
(vi)	
2. (i)	
(ii)	
(iii)	
(iv)	
(v)	
(vi)	
(vii)	
(viii)	
3. (i)	
(ii)	
(iii)	
(iv)	
(v)	
(vi)	
4. (i)	
(ii)	
5. (i)	
(ii)	
(iii)	
(iv)	

COVERAGE OF DESIRABLE ATTITUDES IN PRACTICE (AT COLLEGE)

The extent to which the desirable attitudes are considered by students and college staff to be covered during the college training will be arrived at by asking students, tutors and principals to rate the coverage of each attitude using a check-list as below.

Desirable attitudes	well covered	fairly well covered	covered	slightly covered	not covered
1. (i)					
(ii)					
(iii)					
(iv)					
(v)					
(vi)					
2. (i)					
(ii)					
(iii)					
(iv)					
(v)					
(vi)					
(vii)					
(viii)					
3. (i)					
(ii)					
(iii)					
(iv)					
(v)					
(vi)					
4. (i)					
(ii)					
5. (i)					
(ii)					
(iii)					
(iv)					

1. The extent to which the teachers attain desirable attitudes at the end of the college and retain them towards the end of the first year of teaching will be measured by an attitude scale of the Likert type. The same scale will be administered a second time towards the end of their first year of teaching (see the draft extract from the scale in Appendix).

2. The extent to which the teachers demonstrate the teaching skills in practice will be judged by observation carried out by ITEs and trained college tutors who will observe the teachers at work in the classroom.

The nature of the observation instrument will be decided after further study of the possibility (e.g. Ref. Kent University Bulletin 1965, page 14 and AACTE by Ray H. Simpson, page 8). Also see list of desirable teaching skills to be operationalized further between October 1975 and February 1976.

TO DETERMINE ATTITUDES OF TUTORS RELEVANT TO COMMUNITY EDUCATION

Tutors and principals will complete an attitude scale of the same form as for the students.

Sampling

Our sample will be selected from the 1,100 students graduating in 1975 from the following colleges:

- Klerruu 300 - Grade A. Co-ed.
- Korogure 300 - Grade A and C. Co-ed.
- Katoke 200 - Grade A and C. Co-ed.
- Ilonga 70 - Grade C, men.
- Ndala 75 - Grade C, women.
- Ndwika 75 - Grade C, women.
- Singa Chini 80 - Grade C, men.

The first three colleges were selected because they are involved in the Tanzania, Unicef, Unesco Primary Education Reform Programme (MTUU) and also represent the ten Grade A and C colleges. The other four form the cross-section of the 12 Grade C colleges.

The attitude scale and check-list will be completed by all students graduating from the seven colleges. The second attitude measure and observation will be completed for a sample of 20 percent of the students.

	No. of students in		
	'college'	'field'	No. of tutors
Check-lists	1,100	-	All tutors in the seven colleges
Attitude scales	1,100	200	All tutors in the seven colleges
Observation	-	200	-

A 20 percent stratified sample of the total population will be taken by random selection within each of the teaching ability groups of A, B, C, D. For the purpose of investigating changes in attitude of students the 'field' scores will be compared with the 'end of college' score for the 20 percent sample.

Design

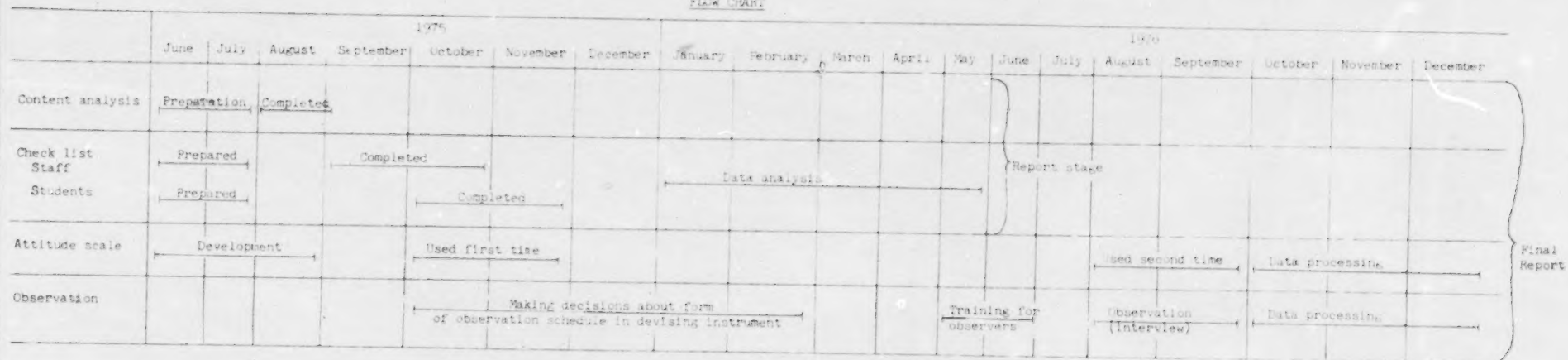
The evaluation will take the form of a survey of present practice and attitudes towards the community education and follow-up of student teachers during their first year of teaching.

All the graduating teachers from the seven colleges will be administered with an attitude scale and a check-list before they are posted to the various primary schools in the country. This will be done to find out the extent to which the students feel their course has covered the 'ideal' objectives and the extent to which they have attained the attitudes related to the community education.

The check-list and attitude scale will be administered to all college tutors in the seven colleges too. The results of the check-list will be used to determine to what extent the present training covers the community education objectives. The attitude scale will help to determine the attitudes of the tutors in relation to community education.

The follow-up survey will be composed of the same attitude scale and observation of their teaching skills during their first year of teaching. This is to find out if they have changed in attitudes and to what extent they are practising the teaching skills required for community education.

FLOW CHART



The instruments used in this study will be constructed by the teacher education evaluation group.
 The nature of the instruments as far as has been determined to date is described in the following table.

Instrument	Data collected	Objective of study	Used by whom	Comment on type of instrument and reference
Check-list for content analysis of existing written teacher education syllabus	Judgement of the teacher education evaluators and curriculum developers as to coverage of desirable skills and attitudes by syllabus as written	II A(a)	Members of teacher education evaluation and curriculum development team	Matrix in which coverage of skills and attitudes is checked off section by section of written syllabus. See pages 61 and 62
Rating students opinions about present courses	Opinion of students as to scale construction of their course to development of the desirable skills and attitudes	II A(b)	All graduating students of the seven colleges	Rating each skill and attitude on a 1-5 scale. 1 = not covered by course 5 = well covered by course See page 63
Rating scale for college tutors opinion about present courses	Opinion of tutors and principals of colleges as to contribution of the course to the development of the desirable skills and attitudes	II A(b)	All the tutors and principals of the seven colleges	Same rating scale as for students with slight change in rubric
Attitude scale for tutors	Attitudes of students towards community education activities and processes	III(a)	By all students before leaving college and by a 20% sample after 8 months teaching	6 Likert type scales, each concerning one of the attitudes about 15 items per scale. See appendix
Attitude scale for tutors	Attitude of tutors towards community educ. activities and processes	IV	All tutors of 7 colleges	Same scale as for students with slight change in rubric
Observation and interview schedule for class visit	Evidence of skills and attitudes being reflected in practice in classroom (observation) and outside classroom (interview)	V	ITEs and college tutors when visiting students towards the end of their first year of teaching	'High inference' type of instrument e.g. recording quality of different kind of behaviour using predetermined criteria. Semi-structured interview. See page 64

Data collection

1. The check-list on coverage by the written syllabus of ideal attitudes and skills will be completed independent v by the curriculum developers and the teacher education evaluation team. The results will be collected by Ndugu M. Sanga/Shayo before the end of August 1975.

A meeting to reach a consensus will be called by the chairman by September 1975.

2. Check-list on coverage of teaching skills and attitudes as seen by tutors and students to be completed by the end of October 1975. The check-list will be delivered by the inspectors who will also explain the purpose of the study.

The forms will be completed and returned to the institute by the same inspectors.

3. Attitude scale to students and tutors: these will be completed during the same visit of the inspectors.

4. Observation/interview. This will be completed by the ITEs and college tutors during their visit to the schools where the 200 teachers in the sample are teaching. The visit will be during August and September 1976. The team will be trained in May/June 1976 at a meeting the venue of which is to be decided later. The ITEs and tutors will administer and collect the papers at the same time.

1. Data Analysis

Check-list on desirable attitudes and teaching skills coverage. A descriptive data analysis will be made to see how well they agree.

2. Attitude scale

In college: Score the five attitudes separately for all the individuals and then form mean for tutors and the 20 percent of students in the sample and then test the difference between the two means using t test (- means of all tutors and students regardless of college).

In field: Score the five attitudes separately for the 20 percent of students in the sample and then: (i) compare college and field mean scores of the same group of students using t test in order to discover if there is any change and in what direction for each of the attitudes; (ii) a regression analysis will be carried out to estimate the effect of influence of school environment (e.g. Ajamaa Village versus ordinary villages), type of college (C or AC).

3. Teaching behaviour

Note that desirable skills on page will be regrouped into five categories (viz., community involvement, classroom organization, communication, empathy and relevance of teaching content to environment) and fully operationalized later.

Then the variations between the teachers' scores on the five categories of skills will be assigned to independent variables (e.g. type of college, C or AC, and environment) by analysis of variance.

Then in a separate analysis any relationship between attitudes and classroom performance will be investigated by the Pearson Correlation Coefficient.

ORGANIZATION AND BUDGET

1.	<u>Manpower</u>	
	Full-time evaluator for two years	72,000sh.
	One secretary for two years	24,000sh.
	Two research assistants for two years	28,800sh.
	Duplicating assistance	200sh.
2.	<u>Travelling costs for:</u>	
	Two members of the team for about 60 trips to the institute 60 x 50sh.	3,000sh.
	Four inspectors to the seven colleges	4,000sh.
	Accommodation for 10 ITEs and seven tutors	2,500sh.
	Travel costs for 10 ITEs and seven tutors for seminar	2,000sh.
	Travel costs for 10 ITEs to visit primary schools	7,000sh.
3.	<u>Materials</u>	
	Stencils 200 x 2/50sh.	500sh.
	Paper 300 reams x 50	15,000sh.
	Ink 60 tubes x 40	2,400sh.
	Postage	200sh.
4.	<u>Data processing: costing</u>	
	(a) Coding - by evaluation team	
	(b) Punching free by University of Dar es Salaam	
	(c) Interpretation - evaluation team	
	(d) Computer analysis - approx. one hour = 350sh.	

APPENDIX

Below are some statements. Read them and write in the box provided as follows:

- 4 if you agree strongly
- 3 if you agree
- 2 if you disagree
- 1 if you disagree strongly

(On co-operation)

1. A teacher should encourage brighter pupils to work on their own to encourage progress. ☐
2. A teacher should plan his/her work with other teachers ☐
3. A teacher should encourage pupils to help one another ☐
4. A teacher should not be expected to spend his/her time in out-of-school activities ☐
5. All teachers should participate in teaching adults as well as children ☐
6. Sharing one's library with others defeats the purpose of self-reliance ☐
7. A teacher should be paid an allowance for extra work in school ☐
8. When the teacher leaves the classroom the children should remain still and quiet ☐
9. The teacher should consider pupils suggestions when planning his/her teaching ☐
10. Parents should keep away from the classroom ☐

ANNEX 10

PROPOSALS FOR THE EVALUATION OF RURAL EDUCATION CENTRES IN SWAZILAND

S. B. Dube
A. C. Dawson

I. REASONS FOR THE STUDY

1. The Swaziland Government signed a credit agreement with IDA on 9 December 1974 providing for inter alia the construction, furnishing and equipping of seven rural education centres, one each near the secondary school at Elulakeni, Big Bend, Ngwane, Ekuphakameni, Vuvulane, Dokolwayo and Entfoujeni to provide inter alia pre-vocational, agricultural, handicrafts and domestic science training.
2. Each centre will provide three distinct programmes:
 - (a) Practical skills for junior secondary students.
 - (b) Rural skill training for school-leavers.
 - (c) Rural skill training for adults.
3. The estimated through-put for each will be:
 - (a) 270 students (3 years) or 90 p. a. $\times 7 = 630$
 - (b) 50 trainees (3-month course) = 150 p. a. $\times 7 = 1,050$
 - (c) 20 2-week courses p. a. with 50 in each = $1,000 \times 7 = 7,000$
 This will be at capacity operation in 1980.
4. This will mean a daily trainee load of 100 (50 school-leavers and 50 adults) for the non-formal training. Since there are several training options (wood, metal, handicrafts, agriculture, sewing, cooking, nutrition, etc.), this loading is thought to be practical.
5. Construction, furnishing and equipping is scheduled for completion by the 4th quarter of 1979.
6. The estimated rural population in a 10-mile radius of each centre is:

Elulakeni	20 000
Big Bend	20 000
Ngwane	50 000
Ekuphakameni	25 000
Vuvulane	25 000
Dokolwayo	20 000
Entfoujeni	40 000
	<u>200 000</u>

7. Subjects offered in the junior secondary schools will be tentatively as follows:

Subject	Class size	Periods per week in Grades		
		8	9	10
English	40	10	8	8
Siswati	40	3	3	3
Mathematics	40	5	5	5
General Science	40	6	6	6
History	40	3	3	3
Geography	40	3	3	3
Religious Education	40	2	2	2

Subject	Class size	Periods per week in Grades		
		8	9	10
Industrial Arts	20	(4)	(6)	(6)
Domestic Science	20	(4)	(4)	(6)
Agriculture	40/20	3	3	3
Physical Education	40	1	1	1
		40	40	40

8. Practical skills courses for non-formal education had not been formulated at the time the proposals for evaluation were drawn up.

9. The evaluation study is being undertaken to assess the extent to which the rural education centres achieve their objectives as outlined in II. 1. In carrying out the study it is hoped that any errors occurring in the project will be corrected by formative evaluation.

II. OBJECTIVES OF THE STUDY

1. General objectives

It is intended that the evaluation study determines whether rural education for youths and adults:

- (i) improves the relevance and usefulness of educational and training programmes for life and work in the rural areas, among both adults and children;
- (ii) promotes the acquisition of remunerative full-time or part-time work related to the performance of graduates from the centres;
- (iii) increases employment opportunities as rapidly as possible both through emphasis on rural development and through measures to expand wage employment and self-employment in the modern sector.

2. Operational objectives

The study will:

- (i) establish the practical knowledge, skills and values to be acquired by the trainees by providing a Blue Print for the development of the curriculum and for the development of summative evaluation measures for the 3-month and 2-week courses;
- (ii) find out whether the trainees take up occupations categorised as appropriate to the courses followed;
- (iii) identify the categories of people who do not make use of the facilities for practical training in the rural education centres and establish the reasons for not utilizing these centres.

3. When the Blue Print mentioned in 2 (i) is established, the curriculum for the various courses will be drawn up by the Curriculum Development Unit.

III. TARGET POPULATION AND SAMPLING

1. Target population

The rural education centres are designed to cater for the practical education of the following groups:

- (i) children and young adults who have never been to school;

- (ii) young adults who dropped out of the formal school system;
- (iii) older men and women living in the rural areas;
- (iv) young adults who are attending the junior secondary schools based within or near the rural education centres.

2. For the purposes of this evaluation study, these groups will be regarded as the target population. The following definitions are offered:

- (a) 'Children' are those who are of primary school age (i. e. from 6 to 13 years).
- (b) 'Young adults' are those who are of secondary school age (i. e. from 14 to 21 years).
- (c) 'Older men and women' are those who are beyond secondary school age (i. e. 22+ years).

3. Sampling

A list of each homestead, within a 10-mile radius of each centre, will be drawn up, using data from the 1976 Population Census. From this list a second list will be drawn up identifying groups (i) to (iii) of the target population. Group (iv) will be identified from the register held in the junior secondary schools.

- (a) A simple random sample in the ratio of - 1 to 5 will be drawn for group (i).
- (b) A simple random sample in the ratio of - 1 to 5 will be drawn for group (ii).
- (c) A simple random sample in the ratio of - 1 to 30 will be drawn for group (iii).
- (d) A simple random sample in the ratio of - 1 to 1 will be drawn for group (iv).

IV. DESIGN OF THE EVALUATION STUDY

1. Variables to be measured

- (a) How many and what proportion of graduates from the rural education centres find, or do not find, remunerative full- or part-time work within a limited time?
- (b) Are the graduates following the kind of work which was intended by the curriculum content of their practical studies?
- (c) What adjustments do they make, in attitude, to the 'job market' (including self-employment)?
- (d) Which groups are more successful or less successful than average in gaining remunerative work, in terms of their performance in the centres?
- (e) What use do they make of further training opportunities?

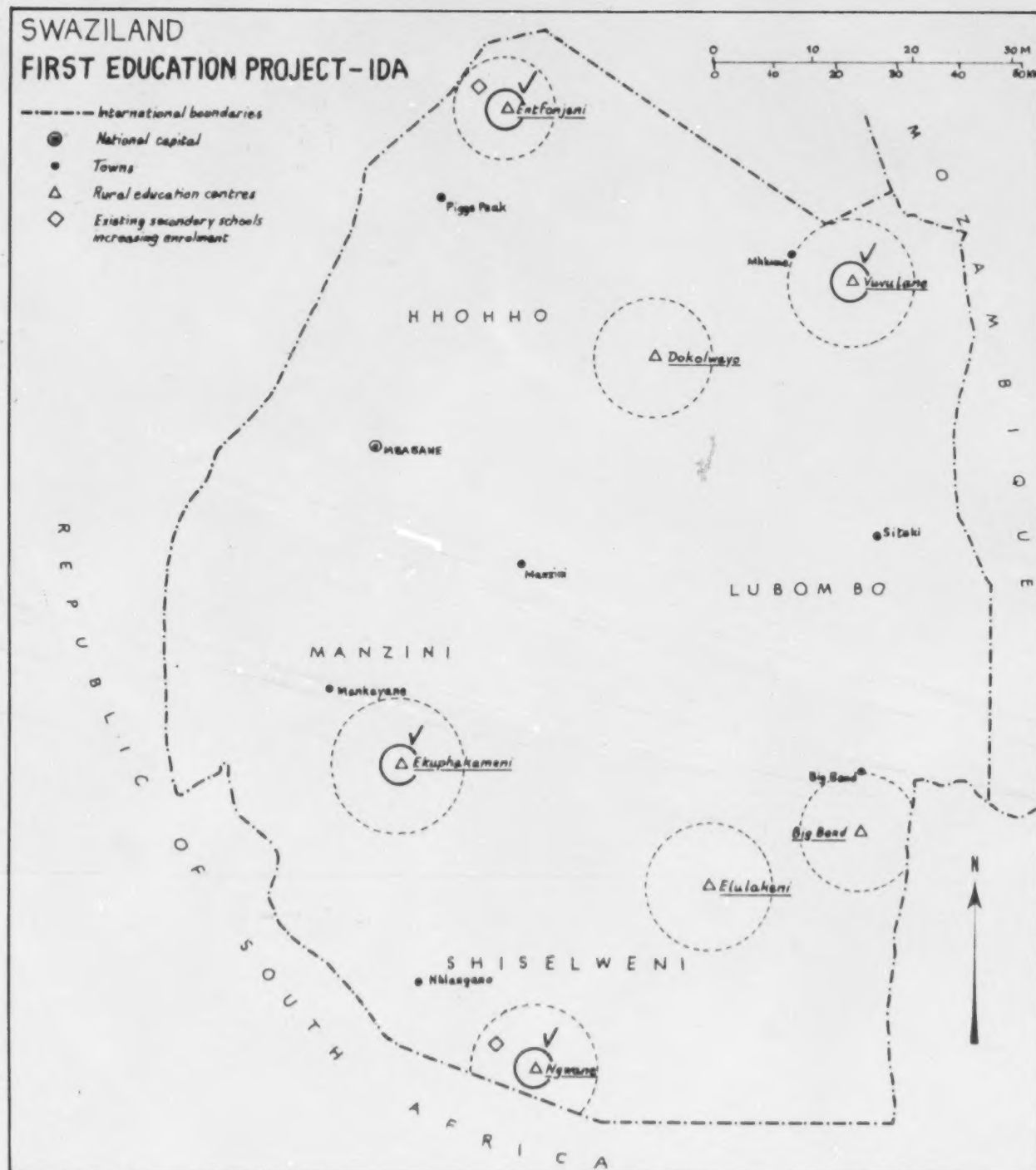
2. The evaluation study will be limited to three or four of the seven rural education centres. One study will be undertaken in each of the four districts, representing different socio-economic characteristics in the immediate environment of each centre. The four centres will be: Entfojeni (Hhohho), Vuvulane (Lubombo), Ekuphakameni (Manzini) and Ngwane (Shiselweni).

3. It is intended that a tracer study be conducted for a series of cohorts graduating from the three programmes outlined in I. 2. Information will be collected as follows:

- (a) The first students entering the junior secondary schools will be admitted in January 1980. In December 1982, i. e. the year of graduation, data for the first cohort will be collected. This information will be used to help establish reliable instruments. Cohorts graduating in 1983, 1984 and 1985 will be followed up annually until 1988, 1989 and 1990

SWAZILAND FIRST EDUCATION PROJECT-IDA

- International boundaries
- National capital
 - Towns
 - △ Rural education centres
 - ◇ Existing secondary schools increasing enrolment



Secondary school	Estimated new/additional places	Estimated total places
Elulakeni		316
Big Bend		316
Ngwane	131	332
Ekuphakameni		316
Vuvulane		316
Dokolwayo		316
Entfonjeni	272	473

respectively. It is felt that a follow-up period of five years will provide valid information in terms of employment and adjustment to the socio-economic environment, and in terms of IV. 1 (a).

- (b) Data will be collected from three cohort groups which follow the 3-month courses. After graduation each group will be followed up after nine months and data will be collected at six-monthly intervals for twelve months, e. g.

(i) Cohort I : January-April 1980 : December 1980, June 1981 and December 1981.

(ii) Cohort II : September-December 1980 : August 1981, February 1982 and August 1982.

(iii) Cohort III: January-April 1981 : December 1981, June 1982 and December 1982.

The first cohort will be used to help establish instruments for measurement.

- (c) The graduates from the 2-week courses will be followed up as follows:

(i) Cohort I : January 1980 : March 1980 and September 1980.

(ii) Cohort II : March 1980 : May 1980 and November 1980.

(iii) Cohort III : May 1980 : July 1980 and January 1981.

(iv) Cohort IV : July 1980 : September 1980 and March 1981.

4. The first set of data will be collected before the graduates leave the rural education centres. The follow-ups will be conducted by means of questionnaires. However, this latter procedure might have to be revised for those who have had no formal schooling, by conducting interviews.

5. If it is considered feasible, it might be necessary to establish a set of control schools for the junior secondary schools. However, this decision can only be made once a study of existing schools has been made.

6. Table 1 on p. 75 indicates in detail the design of the study.

V. INSTRUMENT CONSTRUCTION

1. The following instruments will be constructed:

(a) Tests of achievement

(i) For the 3-year course, the results of the Junior Certificate examinations will be scaled English and practical subjects (i. e. Industrial Arts and Domestic Science and Agriculture). The raw scores for each student will be obtained from the examinations council of UBL. If this is not possible, then the grades A, B, C, D, etc. will be assigned numerical values. These scores will be transformed to standard scores for analysis.

(ii) Achievement tests in practical subjects will be developed for the 3-month and 2-week courses. These will be criterion-referenced. The following procedures will be followed:

- Identification of the purpose of the test.
- Development of the Blue Print.
- Development of detailed specification.
- Preparation of appropriate items.
- Review and editing of the items.

Swaziland - Design of Study

Table 1

A. 3-year course

	Course			Follow-up								
	1st Year	2nd Year	3rd Year	1983	1984	1985	1986	1987	1988	1989	1990	
1980	A	-	-	-	-	-	-	-	-	-	-	
1981	B	A	-	-	-	-	-	-	-	-	-	
1982	C	B	A	A	A	A	A	A	-	-	-	
1983	D	C	B	-	B	B	B	B	B	-	-	
1984	E	D	C	-	-	C	C	C	C	C	-	

B. 3-month course

	Course	Follow-up					June 1982	Aug. 1982	Dec. 1982
		Dec. 1980	June 1981	Aug. 1981	Dec. 1981	Feb. 1982			
I	Jan. -Apr. 1980	I	I	-	I	-	-	-	-
II	Sept. -Dec. 1980	-	-	II	-	II	-	II	-
III	Jan. -Apr. 1981	-	-	-	III	-	III	-	III

C. 2-week course

	Course	Follow-up						
		Mar. 1980	May 1980	July 1980	Sept. 1980	Nov. 1980	Jan. 1981	Mar. 1981
I	January 1980		I	-	-	I	-	-
II	March 1980		-	II	-	-	II	-
III	May 1980		-	-	III	-	-	III
IV	July 1980		-	-	-	IV	-	-

Instrument construction (cont.)

- Preliminary trial and item validation.
- Final selection of questions.
- Organisation of questions into test booklets and their reproduction.

(iii) A knowledge test in practical subjects will be administered to the junior secondary students before they write their external examinations; it will also be criterion-referenced. The same procedure as outlined in (ii) above will be followed.

(iv) A content analysis of English, agriculture, woodwork, metal work, cookery and needlework will be undertaken for the J.C. course. The various courses in the curriculum of the 3-month and 2-week courses will also be analysed. See Dummy Blue Print in Schedule I for an example of such a content analysis.

(b) An attitude scale will have to be developed to measure (predictively) the attitudes of each cohort leaving the training centres after graduating from each of the courses. The attitudes

Schedule I - Dummy table of specification for English¹

Content and skills	BEHAVIOURS															
	Cognitive												Affective			
	A. O. Knowledge					Compre- hension		C. O. Analysis		D. O. Application		E. O. Attitudes		F. O. Participation		
	A. 1 Terminology	A. 2 Specific facts	A. 3 Convention	A. 4 Classification	A. 5 Criteria	B. 1 Translation	B. 2 Interpretation	C. 1 Elements	C. 2 Relationship	C. 3 Organisational Principles	D. 1 Functional application	D. 2 Expressive application	E. 1 Acceptance	E. 2 Appreciation	F. 1 Willingness to participate	F. 2 Active participation
1. 0 Language skills																
1. 1 Listening																
1. 11 Basic listening skills																
1. 12 Listening activity																
2. 2 Speaking																
2. 21 Basic speaking skills																
2. 22 Speaking activity																
2. 3 Reading																
2. 31 Basic reading skills																
2. 32 Reading activity																
2. 4 Writing																
2. 41 Basic writing skills																
2. 42 Writing activity																
3. 0 Literature																
3. 1 Poetry																
3. 2 Prose																
etc.																

¹ Bloom, et al, Handbook on formative and summative evaluation of student learning, pp. 402-403.

measured will be related to their expected occupations in the rural areas. The Likert scale will be used. In the trial sample the subjects will answer for each statement formulated - 'strongly agree' to 'agree', 'uncertain', 'disagree' and 'strongly disagree'. The following procedure will be used:

- (i) compose an item pool;
- (ii) try the item on a sample of respondents;
- (iii) score the record of each respondent.
- (iv) carry out scale analysis to decide which are the best items;
- (v) produce final scale for administering.

(c) A tracer study will be developed to follow up the graduates from the centres for various periods of time as outlined in IV.

(i) In the first stage of the study terminating students will fill out a questionnaire of roughly 20 items which record their immutable characteristics such as sex, date of birth, etc.

(ii) In the second stage a follow-up questionnaire will be sent to the graduates at specified intervals (see IV above). This will contain about ten questions on how the ex-student works to earn a living or continues his education, and how he is adjusting to the labour market.

(d) A check-list for the sample survey will be formulated. This will attempt to establish the categories of people who attend the various courses of the rural education. It will also attempt to elicit information about those who do not attend and establish the reasons for non-participation.

VI. DATA COLLECTION

(a) The summative tests. Data from these tests will be collected at the end of each course as specified in IV above. The teachers in the various centres will be responsible for administering these tests and collecting the data and forwarding to the Examinations Office of the Ministry of Education.

(b) The Junior Certificate results will be collected by the Examinations Office of the Ministry of Education.

(c) The content analysis of the various subjects will be undertaken by the Senior Inspectors concerned with those subjects and forwarded to the Examinations Office.

(d) Data collected by the various centres after administering the attitude scales will be forwarded to the Ministry of Education.

(e) The first stage of the tracer study will be administered by the centres and data will be forwarded to the Examinations Office of the Ministry of Education.

(f) The second stage of the tracer study, i.e. the follow-up, will either be conducted by the Examinations Office of the Ministry of Education or by the Regional Testing Centre.

(g) The checklists will be the responsibility, initially of the District Education Offices. However data collected will be forwarded to the Examinations Office of the Ministry of Education.

(h) Storage of data. All the data collected for each individual will be forwarded to the Examinations Office of the Ministry of Education for processing and storage on a card.

VII. DATA ANALYSIS

1. Data will be analysed in three stages, to accommodate the three courses outlined in 1.2. A sorter or computer, depending upon which is most readily available by June 1979 (i.e. six months before the evaluation project begins).

(a) All data from the 2-week courses will be punched and verified in April 1982. In May the sorting of data will be undertaken.

(b) Data from the 3-month courses will be punched and verified in January 1983. In February the sorting of data will be undertaken.

(c) In January 1991 all data relating to the 3-year course will be punched and verified. In February the sorting of data will be undertaken.

2. (a) In terms of IV.1 (a) above univariate statistics will be calculated to establish the percentage in remunerative occupations and hence the percentage unemployed for all groups.

(b) To establish whether the curriculum suited the various categories of employment followed (see IV.1 (b) above) a one-zero count will be undertaken, thus indicating the percentage doing the kind of work intended by the curriculum content of their studies.

(c) Regression analyses will be run for the comparison of attitude to the job market and achievement in the course offered in terms of (i) full-time remuneration (rural); (ii) part-time remuneration (rural) and (c) urban shift.

(d) When the questionnaires are received from those who have left the centre, the most common categories of work will be established from the 4/5 most frequent occupations cited. These will be related to the content of the practical education which they receive (see IV.1 (d) above).

(e) Univariate statistics will be employed to establish the percentage of those from each group which make use of further training opportunities.

3. Interpretation of data will proceed once data have been processed for each group. A final session of interpretation will take place once the whole project has been evaluated. It may be found necessary, if not desirable, to compare the performance of all three training programmes for effectiveness, etc.

VIII. WRITE-UP

1. Each part of the project will be written up as the work of each part is accomplished. The final report as mentioned in VII.3 will be completed by June 1990. The report in the 2-week course will be written by December 1982; for the 3-month course, the report will be written by September 1983.

The final form of the report will be decided by the Project Evaluation Unit, but should include the following:

- (a) General description of the study;
- (b) methodology used;

- (c) sorts of data collected;
- (d) results of the study;
- (e) interpretation of the results, including any conclusions or recommendations;
- (f) appendices (including technical aspects of the study and tables collected).

IX. BUDGET

This is designed to outline only the main budgetary demands:

1. Meetings and training

(a) Periodic meetings of the Evaluation Unit

This body is to be set up within the Ministry of Education for co-ordinating the Evaluation of the IDA Project.

(b) Content analysis meeting

Three days, involving Senior Inspectors, English, Home Economics, Agriculture and Technical Education.

(c) Item writing

Three to five days, involving the same people as in (b) above.

(d) Checklists

One-day meeting of DEOs to explain what information is required.

(e) Test administrators

One day for one representative from each centre for training in the administration of tests, attitude scales, etc.

(f) Questionnaire and checklist formulation

A meeting of committee for drawing up questionnaires and checklists.

(g) Various meetings

For training and retraining, where necessary.

2. Co-ordinating office personnel

(a) 1 person 3/4 time for co-ordinating all activities.

(b) 2 assistants for (i) coding, (ii) scaling, (iii) sampling, (iv) determining coding systems and punching schemes, etc.

(c) 1 person full-time secretary for typing, mailing, etc.

3. Travel

(a) For various meetings.

(b) Visiting centres.

4. Printing

(a) Instruments

Formula : estimated length of instruments x no. of kits x 2

(b) Stencils

Formula : no. of pages x 3.

FLOW CHART

Month	Sampling Gps. I II III IV	Test Construction Achievement Knowledge	Scaling of J.C.	Attitude scale construction	Questionnaire Construction 1st stage 2nd stage	Check- list construction	Printing	Data collection	Coding punching and Data Analysis	Write-up	Evaluation Unit Meetings
June 1979	List of homestead in each community drawn up	Content analysis		Compose item pool	Identify activities	Identify activities					Co-ordination
July		↓		↓	↓	↓					
August		preparation of items		↓	Pre-test	Pre-test					
September		↓		Pre-test							
October		Preliminary trial		Item analysis	Finalise	Finalise					
November		Item analysis		Final Instrument							
December		Final selection of questions		↓							
January 1980	Draw samples for Gps.	↓									
February											
March								2 week course Cohort I			↓
April											
May								2 week course Cohort II			↓
June											
July								2 week course Cohort III			↓
August											
September								2 week course Cohort IV			↓
October											
November								2 week course Cohort II			↓
December								3 month course Cohort I			↓
January 1981								2 week course Cohort III			↓
February											
March								2 week course Cohort IV			↓

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FLOW CHART (continued)

Month	Sampling Gps. I II III IV	Test Construction	Scaling of J.C.	Attitude scale construction	Questionnaire Construction		Check- list construction	Printing	Data collection	Coding punching and Data Analysis	Write-up	Evaluation Unit Meetings
		Achievement Knowledge			1st stage	2nd stage						
April												
May												
June									3 mth. course cohort I			↓
July												
August									3 mth. course cohort II			↓
September												
October												
November												
December									3 mth. course cohort (I-III)			↓
January 1962												
February									3 mth. course cohort II			↓
March												
April												
May												
June									3 mth. course cohort III			
July												
August									3 mth. course cohort (I)			
September												
October												
November												
December									3 mth. course cohort III			↓

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Annex 10

FLOW CHART (continued)

Month	Sampling Gps. I II III IV	Test Construction	Scaling of J.C.	Attitude scale	Questionnaire Construction		Check- list construction	Printing	Data collection	Coding punching and Data Analysis	Write up	Evaluation Unit Meetings
		Achievement Knowledge			1st stage	2nd stage						
January 1983									3 yr. course gp A			
February ↓ December									3 yr. course gp A			
January 1984									3 yr. course gp B			
February ↓ December									3 yr. course gp A+B			
January 1985									3 yr. course gp C			
February ↓ December									3 yr. course gp A+B+C			
January 1986												
February ↓ December									3 yr. course gp A+B+C			

FLOW CHART (continued)

Month	Sampling Ops. I II III IV	Test Construction	Scaling of J:G.	Attitude scale construction	Questionnaire Construction		Check- list construction	Data collection	Coding punching and Data Analysis	Write up	Evaluation Unit Meetings
		Achievement Knowledge			1st stage	2nd stage					
January 1987											
February											
↓											
December									3 yr. course SP A+B+C		↓
January 1988											
February											
↓											
December									3 yr. course SP D+C		↓
January 1989											
February											
↓											
December									3 yr. course SP C		↓
January 1990											
February											
March											
April											
May											
June											

Regional Seminar on Educational Evaluation

(c) Final report

Three reports for each course plus final report. Formula : 150 pages x 50 copies.

5. Punching

Coders : 3 weeks of punching of data from each course.

6. Sorter/Computer

(a) Which machines to be used will be determined at a later date.

(b) If computer used will need 4 weeks' assistance from computer operator.

ANNEX 11

A SUDANESE COMPARATIVE STUDY FOR TWO CATEGORIES OF PRIMARY SCHOOL TEACHERS: (i) THE GRADUATES OF THE PRIMARY TEACHER-TRAINING INSTITUTES - (ii) THE GRADUATES OF KHARTOUM IN-SERVICE TRAINING INSTITUTE

M. M. El Hussein

I. BACKGROUND

There are two types of regular training institutes for primary school teachers in the Sudan at the present time; namely the Primary Teachers Training Institutes (PTTI) and Khartoum in-service Training Institute (ISEKTI).

The PTTI selects its candidates from students who successfully complete the junior secondary cycle. This means that they have had nine years of schooling before they are eligible for joining the PTTI. At present there are fifteen different Institutes distributed in the country, six of which are for training women teachers. All these follow the same programme and sit for the same examination in subject matter and education. All these are referred to here as PTTI.

PTTI provides its students with both academic and professional training which extends over a period of four years, after which they graduate as primary school teachers if they qualify.

ISEKTI, on the other hand provides mainly professional training for teachers on-the-job. The 'students' here are recruited directly as trainee primary school teachers after graduating from the high secondary schools. This means they have completed 12 years of schooling by the time they join the ISEKTI. They join the teaching profession with practically no training.

Since they have finished the secondary cycle, they do not need much subject matter. However they are given a small amount of subject matter which is directly related to the curriculum of the primary cycle.

ISEKTI has branches distributed in a few towns in the country. Students in all branches receive more or less the same programme. The programme consists of assignments prepared by subject matter experts under the direction of the mother Institute in Khartoum. In addition to that the teachers, who teach regularly at their schools, are visited by field supervisors. The field supervisors attend lessons with them and discuss these lessons with them. The student teachers also attend weekly meetings to discuss their assignments with field supervisors and sometimes subject experts may attend such meetings. They also attend short courses during the summer vacations. These short courses are mainly for acquiring some skills and discussing major difficulties.

It is worth mentioning that the students of PTTI are somewhat more committed to the teaching profession than those of ISEKTI. The latter leave the teaching profession when they find a more attractive job.

II. PROBLEM

There is a generally accepted belief that teachers who have gone through the training programme provided by PTTI acquire basic skills, knowledge and desirable attitudes which qualify them to be competent teachers in the primary cycle. However this belief is now being questioned by some people. This necessitates its validation.

The advocates of ISEKTI on the other hand, claim that the teachers who receive their programme are not inferior, if not really better than the graduates of PTTI, so they claim that with less effort and less money and in a shorter period, they train teachers who are at least as competent as those who graduate from the traditional Institutes (PTTI). This claim lacks also validation.

So the purpose of this project is to probe into this problem and to try to give rigorous answers to the questions posed.

The problem can be further broken into more specific dimensions: In what respects are the teachers who graduate from PTTI better than those who graduate from ISEKTI?

This problem can be expressed in the following null hypothesis:

There are no significant differences between teachers who graduate from PTTI and those who graduate from ISEKTI with respect to the following dependent variables.

- (a) Teacher effectiveness as rated by inspectors using a rating scale (1) constructed by the experimenter.
- (b) Their attitudes towards the teaching profession as measured by an attitude scale (2) of the Likert type. The scale is constructed by the experimenter.
- (c) Their attitudes towards work in the rural areas as measured by an attitude scale (3) of the Likert type, and by a questionnaire (4) to be completed by inspectors and directors of schools in which the subjects work. Both instruments are constructed by the experimenter.
- (d) Willingness to better the community in which the school is situated as judged by the questionnaire referred to in (c) above.
- (e) Their understanding of principles of educational theory as measured by a standardized test (5) prepared by a subject expert. This will be based on the common elements in the educational programme followed in both types of institutes.
- (f) Their understanding of basic principles of the Arabic Language as measured by a test (6) to be prepared by an expert in Arabic language. The basic principles are those covered in the higher secondary schools and PTTI.

Full description of these instruments will be given in the section under the title 'Design of the study'.

III. SIGNIFICANCE OF THE PROBLEM

The significance of this problem can be summarized in the following points:

1. It is expected that the study will provide information based on objective considerations which will enable responsible people to take the appropriate decision regarding the type of training suitable for primary school teachers. The ISEKTI is sponsored partly by Unicef on an experimental basis.

If this type of training is appropriate, the government will eventually take full responsibility for the Institute.

2. The study is expected, hopefully, to result in providing information which may be used to improve the prevailing modes of teacher training in the Sudan. No similar study has been conducted before.

3. The study will also open new avenues for further studies to evaluate teacher training in our country. Without continuous objective evaluation, no progress is expected.

IV. DESIGN OF THE STUDY

Sampling

The target population is composed of graduates of PTTI and the graduates of ISEKTI in the academic years, 1975/76 and 1976/77. The expected number is estimated to be 5,000. However, the study will be limited to two provinces out of the fifteen provinces in the Sudan. The expected number of teachers graduating each year is 2,400. Each province will need teachers in proportion to the number of primary schools in it. So the number of teachers who will work in the chosen provinces cannot be now known; it will not be less than 50. The criterion for choosing the provinces will be based on their sizes and how well they represent the variety of schools in the whole country; that is the chosen provinces should contain as many schools as possible, and should contain both town schools as well as village schools.

Two groups of fifty newly-trained teachers will be chosen at random within schools of each of the two provinces, one cohort for ISEKTI and one for PTTI who graduate in March, 1976. Another cohort will be chosen for 1977 in a similar way from two other provinces from the graduating teachers in March, 1977. In this way the study is expected to extend over a period of two years. If any extraneous factors intervene, only the sample of 1976 will be used for the final analysis.

Design

Phase	Tests	PTTI	ISEKTI	Data processing
I	Pretests: given just before time of graduation	✓	✓	Statistical analysis of pretests to see differences in performance due to the different treatments
	Post-tests: given at about one year after graduation	✓	✓	Statistical analysis is carried out to see if any differences exist after one year of service
II	The same procedure repeated with a new group of 100 subjects from two other different provinces	✓	✓	

Instruments

1. Instrument two is intended to measure the attitudes of the would-be teachers and teachers just before graduation and one year after graduation, towards the teaching profession. The scale is of Likert type and will contain 10-15 items of statements about the teaching profession. The respondent is required to state his view in a scale of five points: strongly agree (SA), agree (A), uncertain, disagree (DA), strongly disagree (SDA). During its development the scale will first be administered to the final class of student teachers in a nearby institute. Item analysis will be carried out on the responses. An effort will be taken to improve the items or omit the inappropriate ones.
2. Instrument three is also an attitude scale of the Likert type. It is intended to measure attitude towards working in rural areas. A similar procedure to the one used in (1) above will be adopted for trying out the items. The final version is expected to contain 10-15 items.
3. Instrument four is a questionnaire containing relevant information about the subjects, inspectors and directors of schools in which the subjects work. This questionnaire is completed by the directors and inspectors, there is a section in the questionnaire made up of a checklist ten items. The respondent has to give his view on a three-point scale: Agree, uncertain and disagree. The questionnaire will be distributed to the inspectors and school directors in areas where the subjects work. The checklist will be tried in a nearby district to the place I work, to see the expected responses. An effort will be used to improve the items and the format of the questionnaire as a whole according to the types of responses received. The questionnaire is intended to collect information concerning the subject's stands with respect to working in the rural areas and their willingness to be involved in activities to improve conditions in the school community.
4. Instrument one is a rating scale which is intended for measuring, hopefully, teachers effectiveness as judged by inspectors. The instrument is constructed by the experimenter and has items covering ten aspects, namely: (1) personality; (2) language; (3) general appearance; (4) understanding of subject matter; (5) methods of teaching; (6) lesson planning; (7) visual aids; (8) student work; (9) readiness to volunteer to help students; (10) interaction with community. Each of these areas is further subdivided into further details. Every detail will be rated on a scale of four points: Very good (4); Good (3); Average (2); Weak (1). The result will be divided by two to give a total of a hundred so that it may conform with the scale used by inspectors. In this case the scale would contain 50 details each of which carries a weight ranging from 1 to 4.

The experimenter will personally meet the inspectors and explain to them how to use the rating scale. Since the scale cannot be 100% objective, there will be variations between raters. Unfortunately, there is no easy way of knowing the degree of agreement between different raters. However the differences between different raters will hopefully cancel out since subjects from both groups are going to be rated by the same raters. But there is a chance of running a small pilot study to see if the difference between raters is significant or not. This can be accomplished by taking a sample of inspectors in the province in which I work.
5. Instrument five is a standardized test in basic principles of educational theory. The test will be constructed by an expert on the subject or could be collected from different resources.

The test would be used on a similar group to see its reliability. Obviously item analysis would be carried out to ensure its good quality.

6. Instrument six is the Arabic language test. This will be constructed by an expert on the subject and will be administered to a similar group to improve its qualities in a similar way to the procedure used in instrument five above.

V. DATA COLLECTION

The flow chart (see appendix V) shows the dates for administering the tests and completing the questionnaires. The results will be directed to the experimenter as soon as they are ready.

As soon as the data are collected, they will be classified and put into punch cards if computer is possible to use. At present there are three computers, but I cannot be sure if it will be possible to use them for this study. If computer could not be used, calculators will be used in working out the statistical operations.

VI. DATA ANALYSIS

First analysis of variance will be applied to the pretests to see if there are significant differences between the two groups. Sex will be considered as an independent variable in this connection (see table).

A similar analysis will be carried out for the post-tests, teacher effectiveness, willingness to work in rural areas and attitude scales.

Group (PTTI)	Group (ISEKTI)
Males	Males
Females	Females

VII. BUDGET ESTIMATES

1. Travel allowances

Twenty days of work are needed.

2. Personnel

- One full-time Project-co-ordinators for 12 months
- 2 half-time research assistants for 12 months.
- 20 days of full-time typing.

3. Printing costs

- For pretests and post-tests 3,000 copies of 15 pages are needed. This equivalent to $\frac{3,000 \times 15}{500} = 90$ packets of duplicating paper.
- 50 stencils are needed for tests preparations including try-outs.

- Computer costs:

- (a) Punching - $200 \times 3 \times 80 = 48,000$ characters.
- (b) One man-week or expert in programming.
- (c) Six hours of computer work.

Information to be collected in the questionnaires

A. From students (To be completed by newly graduating teachers)

- Name To identify the subject so as to give him the post-tests.
- Family Home To know the background of the subject. Is he/she from rural or urban areas?
- Sex This will be used in the final analysis to see effect of sex, and to see if there is any interaction between sex and the mode of training.
- Age This may be useful to ensure homogeneity of the groups with respect to age. Further, it may help in interpretation of the results.
- Date of graduation from the junior secondary school: This may help in deciding to consider achievement in the general secondary school certificate as a covariate. Until now I am not sure about the contribution of this to teacher effectiveness and attitudes. The date will help in locating the results of each subject on the examination referred to.
- Date of graduation from high school: This will show if the graduates of ISEKTI had directly joined the Institute or government service after graduating from high school.
- Date of graduation from Institute: This is needed for identification of subjects.
- Date of joining the government service: This information may be needed further in case of failure in some subjects.
- List of four places the teacher wants to work in: This piece of information could be used to check their response in the attitude scale towards working in rural areas.
- Name of present school (if applicable).
- Name of present town or village in which the school is situated.
- Name of the province in which the school is situated.
- Name of the Institute from which the subject had his training: information in 10-13 is needed to identify easily the subjects and organize the results of the tests and the questionnaires.

B. To be completed by inspectors and directors of schools

Information about teachers inspected (both men and women):

1. Name of teacher.
2. Date of teacher's graduation from Institute (see 10 - 13 above).

Information about inspectors or directors of schools:

1. Name of inspector or school director (for further reference if necessary)

2. Sex: This may be needed for comparison of rating by males and females.
3. Place of work: In case of school directors write name of school.

Instruments

The following instruments are only tentative and are meant to be illustrative. They are going to try and their reliabilities will be calculated. Moreover item analysis will be applied to ensure suitability of each item. Correlation coefficients for each item with the total score will be worked out. Only items with highest coefficients will be retained, using the formula:

$$\alpha = 2 \left(1 - \frac{\frac{1}{2}\sigma_{\text{odd}}^2 + \frac{1}{2}\sigma_{\text{even}}^2}{\sigma_T^2} \right)$$

where $\frac{1}{2}\sigma_{\text{odd}}^2$ is the variance of the scores for even respondents;
 and $\frac{1}{2}\sigma_{\text{even}}^2$ is the variance for the scores of even respondents;
 σ_T^2 is the total variance of the scores of all the respondents.

Appendix I. Attitude towards working in rural areas

	SA	A	Uncertain	DA	SDA
1. The work in rural schools is most interesting.					
2. I have no objection to work in villages had not been for the hardships I may find there.					
3. Life in villages is enjoyable.					
4. People of the rural areas are not co-operative.					
5. Life in the rural areas is barren and monotonous.					
6. People in rural areas need more help than urban people.					
7. One does not know what to do about his leisure time in villages.					
8. Working in rural places is not as dull as some people may think.					
9. You can always find a good way of spending your leisure time in something useful in rural areas.					
10. People of the rural areas are more innocent than people in the urban areas.					
11. I feel relieved when I leave the noise of the town and go to the countryside.					
12. I feel relieved when I leave the dull life of the village and go to the city and enjoy life there.					
13. Entertainment life in the city is unnecessary for a developing country.					
14. Leisure life in the cities is the sign of civilisation and progress.					
15. The village boys are more polite than the city boys.					
16. People like the strong relations in the rural areas.					
17. People like the city life because nobody interferes with their personal life.					

SA = Strongly agree; A = Agree; DA = Disagree; SDA = Strongly disagree.

Appendix II. Teacher effectiveness rating scale: to be used by inspectors

	Excellent 4	Good 3	Average 2	Weak 1
1. <u>Personality</u>				
- Cheerfulness				
- Kindness				
- Liveliness				
- Respectfulness				
- Democracy				
2. <u>Language</u>				
- Fluency				
- Vocabulary				
- Comprehension				
- Speed				
- Use of appropriate terms				
- Clarity of speech				
- Ability to explain well				
3. <u>General appearance</u>				
- Cleanliness of dress				
- Cleanliness of body				
- Use of acceptable dress in society and school				
4. <u>Understanding of Subject matter</u>				
- Mastery of facts				
- Mastery of principles				
- Ability to apply and infer				
- Use of relevant examples				
- Ability to answer student questions				
5. <u>Methods of teaching</u>				
- Use of appropriate techniques				
- Use of psychological principles of reinforcement				
- Use of a variety of techniques				
- Positive classroom discipline				
- Student involvement				
- Understanding the educational objectives of the curriculum				
- Ability to supervise student's work				
6. <u>Lesson planning</u>				
- Clarity of the aim of lessons				
- Proper sequential development of ideas				
- Relevance of the lesson to syllabus				
- Organisation of lesson planning notebook				
- Comprehensiveness of lesson planning notebook				

Appendix II. (continued)

	Excellent 4	Good 3	Average 2	Weak 1
7. <u>Visual aids</u>				
- Variety of visual aids				
- Effective use of visual aids				
- Organisation in keeping them				
- Ability to integrate them with lesson				
- Quality of the visual aids				
- Ability to develop new visual aids				
8. <u>Student work</u>				
- Appropriateness of amount				
- Carefulness in marking				
- Cleanliness of the work				
- Follow-up				
9. <u>Readiness to volunteer to help students</u>				
- Extra time spent on student as a class				
- How much is he studying on his own				
- Amount of individualized consultation				
10. <u>Interaction with others in school and community</u>				
- Co-operation with colleagues				
- Co-operation with students				
- Involvement in all school activities				
- Involvement in community activities				

Appendix III. Attitude scale towards the teaching profession

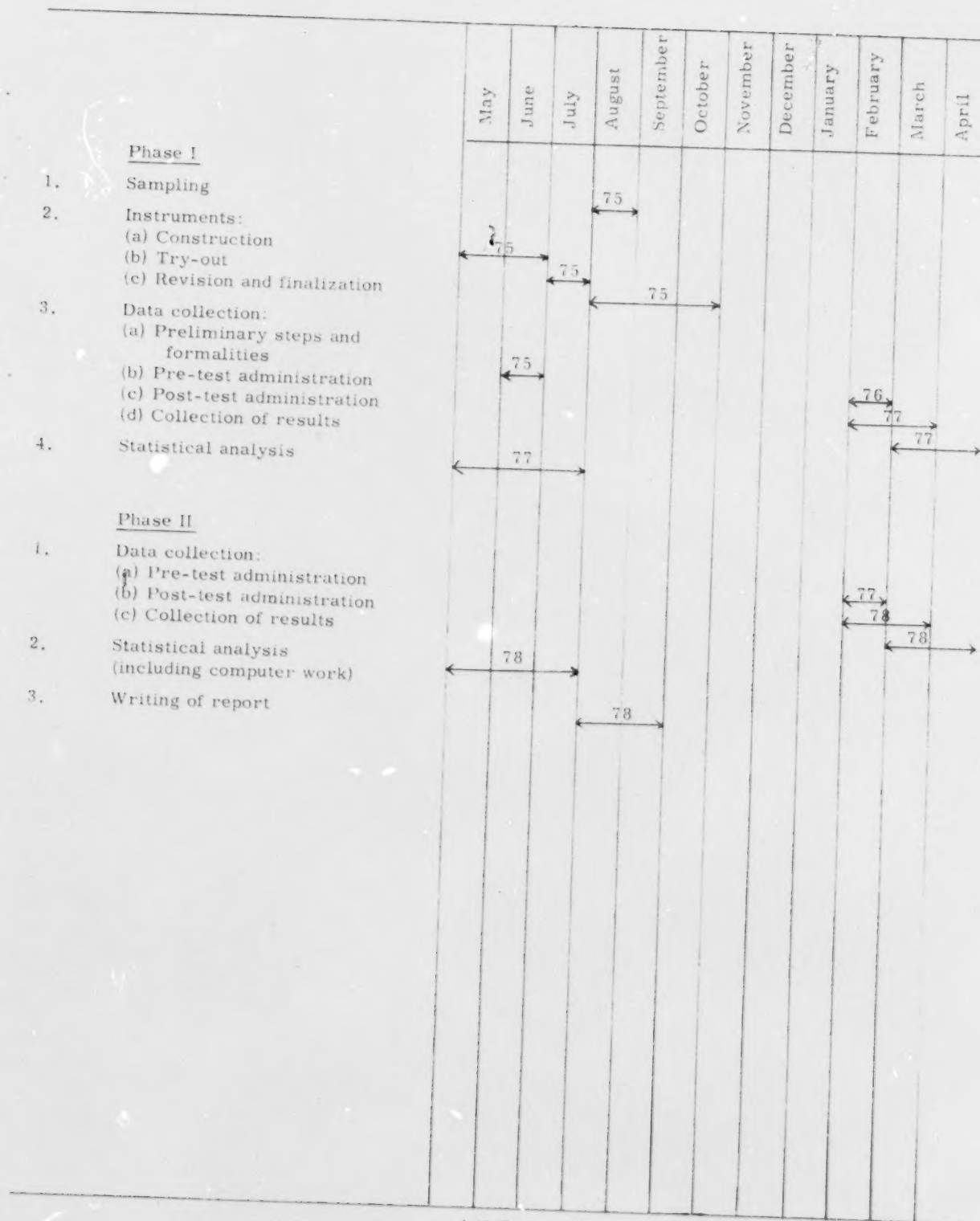
	SA	A	Uncertain	DA	SDA
1. I feel that teaching is an interesting profession					
2. I find joy when I work with children					
3. I get nervous when pupils keep asking me silly questions					
4. It is often difficult to keep one's temper with school children					
5. If I had to start my life over again, I should again choose to be a teacher					
6. I think that the teaching profession is unrewarding					
7. If I had any other choice, I would not have chosen to be a teacher					
8. I feel greatly relieved when the school day is over					
9. Primary school boys need some of their natural meanness taken out of them					
10. Teaching is a dull profession					
11. Teaching is a tedious profession					

SA = Strongly agree; A = Agree; DA = Disagree; SDA = Strongly disagree.

Appendix IV. Check-list for questionnaire to rate teachers on their willingness to work in rural areas and willingness to better the life of the school community - To be filled by inspectors and directors of primary schools

		Agree	Uncertain	Disagree
1.	He would complain if he was asked to work in the villages			
2.	He would not refuse to work in towns			
3.	He mixes freely with ordinary people such as illiterates, farmers, labourers and poor people			
4.	He participates in social activities in the school community			
5.	He volunteers to teach or organize literacy campaigns			
6.	He shows interest to know the social atmosphere around the school			
7.	He has friendly relations with people in the school community			
8.	He is liked by the people living near the school			
9.	He does not refrain from doing manual work			

Appendix V. Flow Chart



ANNEX 12

HIGHER SECONDARY EDUCATION IN THE SUDAN

Abdel Rahman Tayfour

Aim: To study the distribution of students between academic and vocational education in the years 1969/70-1973/74

Objectives of the study

1. To see the general trend of shifting education towards vocational education.
2. To find out how the decision of gearing education towards the target of 60 per cent vocational and 40 per cent academic is being achieved.

Introduction

Until 1969 education in the Sudan was run on an old educational ladder (4 years primary, 4 years intermediate and 4 years secondary).

In 1970 a new educational ladder was introduced (6 years primary, 3 years junior secondary and 3 years higher secondary).

The implementation of this new ladder was started in the school year 1970/71. This change has affected the whole educational process in many aspects. This study intends to tackle one aspect as shown above.

Target population

Population will be the higher secondary schools students in the years 1969/70 to 1973/74.

Variables

- (i) Academic versus vocational.
- (ii) Boys versus girls.
- (iii) Boarding versus day students.
- (iv) Regional distribution.

In a developing country like the Sudan the balance between academic education and vocational education is very important indeed bearing in mind that the government launched huge development programmes in agriculture, industry and other fields of development. These programmes require skilled and well-trained technicians in the above-mentioned fields.

The balance between the enrolment of girls and boys in the different types of secondary high schools is also important in meeting the requirements of these programmes.

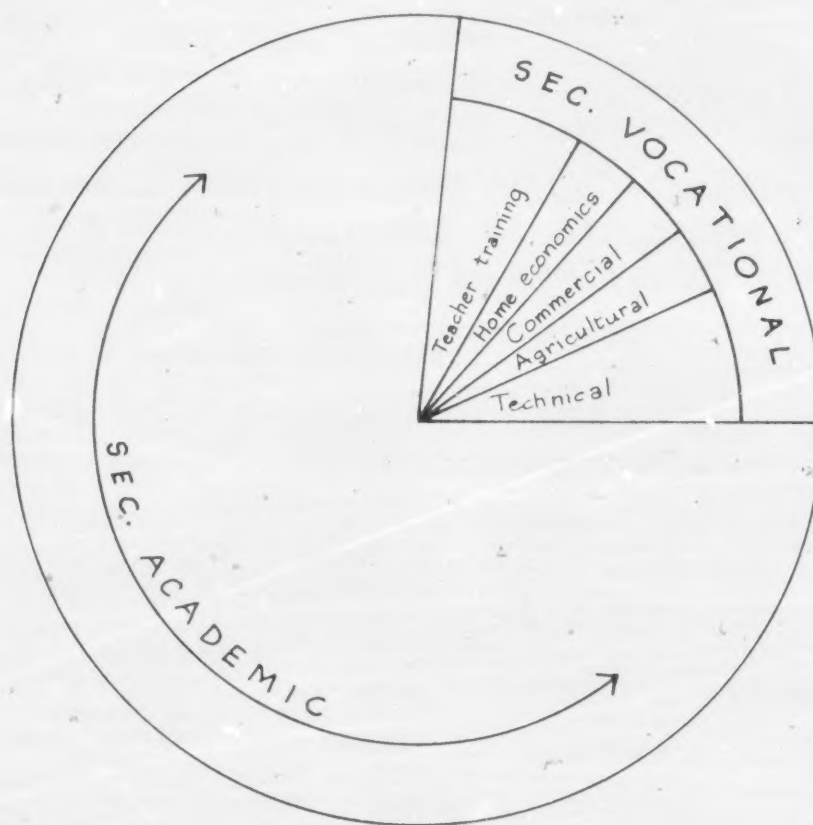
Boarding schools swallow a large proportion of the budget allocated for education and this affects the expansion of education as a whole and secondary higher education in particular. On the

other hand boarding education in the Sudan is a must because it enables boys and girls from rural and less-privileged sectors of society to compete with those from privileged areas.

The regional distribution of education is also a problem for the country and this has to be faced and tackled in a way which will secure a fair and balanced distribution of educational opportunities taking into consideration:

- (i) The financial resources of the country.
- (ii) Provision of education at the primary level and junior secondary level.

Diagram I. To show the distribution of students between academic and vocational education



Such considerations are a necessity for a country striving for social equity and the welfare of its people.

Data collection and analysis

The Educational Statistics Division of the Ministry of Education issues an annual book of "Educational Statistics". This series of books (1969/70-1973/74) will be the main source of data required for this study.

The relevant data will be collected from these books and tabulated in Table 1 (showing the distribution of boys and girls between secondary academic schools on the one hand, and vocational schools on the other). Other tables for regional distribution and, boarding and day students will be prepared in the same way. Also percentages will be worked out, graphs and illustrative diagrams will be drawn to show the general trend of the shift towards vocational education.

Table 1. Numbers of students enrolled in secondary high schools

Year		Enrolled in secondary high schools									
		1969/70		1970/71		1971/72		1972/73		1973/74	
Type		Numbers	%	Numbers	%	Numbers	%	Numbers	%	Numbers	%
<u>Secondary academic</u>											
	Boys										
	Girls										
	Total										
<u>Secondary vocational</u>											
Technical	B										
	G										
	T										
Agriculture	B										
	G										
	T										
Commercial	B										
	G										
	T										
Home economics	B										
	G										
	T										
Teacher training	B										
	G										
	T										
Total vocational											
Total all secondary											

ANNEX 13

THE 'ZEMECHA' (DEVELOPMENT THROUGH CO-OPERATION ENLIGHTENMENT AND WORK) EVALUATION PROJECT IN ETHIOPIA

Gabeyehu Kumsa
Kebbede Fresenbet

INTRODUCTION

The 'Zemecha' (Development through co-operation, enlightenment and work) is the programme, in which nearly 60,000 students and teachers from the upper-secondary, post-secondary institutions, and Universities are participating in the campaign for the development of the rural areas. The objectives of the 'Zemecha' are linked strongly to the new programme for education envisaged by the government.

During the Rural Development Campaign the first group of students and teachers will be gaining practical experience in many aspects of the new role which education will be assuming in the countryside. They will also be gathering, formally and informally, valuable data and information which will make possible a realistic realignment of the education system towards the new objectives.

The 'Zemecha' Programmes

The objectives of the campaign will be interpreted and implemented through eight programmes. These are summarized as follows :

(i) Ethiopia Tikdem, which will spread the new philosophy to the youth and the people and lay foundations and directions for the implementation of this philosophy. This programme will have the task of convincing people that every Ethiopian shares an equal responsibility for the unity and progress of the country. It will teach people to avoid practising discrimination and oppression against each other on grounds of physical endurance, education, wealth, family descent and authority. It will work towards freeing people from self-seeking individualism and strive instead for the common good, develop the spirit of co-operativeness, earning lasting benefits to the nation at large. It is one of the objectives of this programme to bridge the wide intellectual and attitudinal gaps between the educated and the uneducated by means of making one learn from the other through discussion and hard work.

(ii) The Infrastructure Programme anticipates the construction of roads and schools and the introduction of prototype village technology so that the rural people will be able to break out from the shackles of poverty, hunger and thirst.

(iii) The Health Programme will center its activities around the principle that 'health is a community affair and responsibility' realising that most of the diseases in the country can be controlled through simple personal and environmental health measures. The campaigners will therefore initiate the construction of safe drinking water supplies.

(iv) The Basic Education programme will promote literacy and numeracy as functional tools in society and in the development process, opening the way to mass communication between

people and laying the foundation for the acquisition of future skills. The basic education programme is founded on the understanding that illiteracy and ignorance among the masses has permitted oppression, has degraded the dignity of labour, has fostered strife between people, has kept them from their own cultural heritage and has inhibited their full development.

(v) The Agriculture and Co-operative Services Programme.

Tikdem' philosophy, '... the benefit to be realized from agriculture should be sufficient, not only to support the livelihood of the farmer, but also to help uphold the Ethiopian economy. In order to realize this objective, improved farming and animal husbandry practices must be utilised throughout Ethiopia'. In order to help achieve the ideas expressed above, the Agricultural and Co-operative Services Programme will carry out two major activities : (a) Instructing the farmer on improved farming methods or techniques for the purpose of bringing about better farming practices, and (b) the people get organized in order to bring their collective strength into play.

(vi) The Cultural Programme has two main objectives: (a) it will explain to the Ethiopian Societies the importance of preserving their rich cultural heritage. It will also try to make individuals and religious houses aware of the fact that historical objects are public and national and not private properties. (b) The second and more important objective is to wage a campaign against beliefs and attitudes which are inimical to basic socio-economic changes and progress.

(vii) The Land Reform Programme has as its central objective to explain to the public the land reform legislation that is proclaimed on March 4th 1975.

(viii) The Programme for Collection of Data. Campaigners will be involved in the collection of a range of data which is essential to the design of future development projects.

Purpose of Study

The purpose of this study is to make a general survey and evaluation of the activities of the students of high schools and colleges who have been sent to the countryside to participate in the rural development programme of the nation. The study at this stage will focus on incorporating built-in formative evaluations in order to effect immediate changes of improvement as the programme is carried out. Results of the study will be fed into the programme development mechanism of the campaign to take corrective measures at appropriate times.

Strategy

There are three major stages to be followed for the study.

Stage One : Identify the major dependent variables of the eight programmes.

Stage Two : Design appropriate instruments for measuring and evaluating the achievement of the programmes.

Stage Three : Processing the data and distributing evaluation findings to all concerned.

PARTIAL PREPARATION OF THE STUDY

The eight development programmes are so wide and of immense magnitude that, at this stage, due to lack of time it is difficult to complete all the preparations needed for the three stages

of the entire study. An attempt has, therefore, been made to tackle only the infrastructure part of the programme, which will cover in some detail, though, not comprehensive, only an eighth of the total study to be undertaken in the near future.

The Infrastructure Programme

The infrastructure programme has five major categories. These are : (1) Alleviation of shortage of water, (2) building of feeder roads, (3) implementing proclamation of land reform, (4) building primary schools and community centers, (5) introducing simple and new rural technology.

Stage One

Identification of major dependent variables :

- (1) To alleviate the shortage of water
 - (a) In the rural sector it anticipates to drill (hand-dug) wells to a depth not exceeding 30 meters using intensive labour.
 - (b) It will construct stock ponds wherever required and feasible.
 - (c) It will try to construct natural reservoirs and water tanks.
 - (d) It will enlarge and protect springs and keep them in sanitary conditions.
- (2) To build feeder roads
 - (a) In co-operation with the Ethiopian Highway Authority it will help in the construction of feeder roads that are already planned and programmed.
 - (b) In the centre where the campaign will take place, it will undertake the construction of inter-village and village market roads for an average length of about 5 kms per center.
- (3) To implement land reform proclamation .
 - (a) Land will be measured and divided into units of 400 hectares, which will again be divided into sub-units of 10 hectares.
 - (b) Redistribution of 10 hectares of land to each farmer.
- (4) To build primary schools and community centers .
 - (a) 140 primary 4-classroom school units will be built.
 - (b) 25 community center halls will be built.
- (5) To equip the rural areas with simple and inexpensive technological innovations.
 - (a) Pumps will be developed that draw water from a well using wind power
 - (b) Hand pumps for water wells will be developed.
 - (c) Pumps will be developed that could operate in streams .
 - (d) Clay blocks (bricks) for construction purposes will be developed.

Stage Two

Data collection

The data will be collected by administering a questionnaire to the leaders of each campaign in each of the 600 'Weredas'; at the same time an interviewer will complete the same questionnaire through interview and direct observation at the center. The questionnaire is to be administered twice in the campaign period at an interval of four months to see changes in between.

Based on the National Survey, the Government would be able to channel its resources accordingly by 'Woreda', 'awraja' and province following the needs of the people.

Items of the questionnaire

The following are the items of the questionnaire on the dependent variables related to the infrastructure programme shown in stage one above.

I. Steps taken to alleviate water shortages

A. Digging of Wells

1. Number of wells required for the community at the rate of one well within a radius of (a) 1 km (b) 2 km (c) 3 km
2. Number of wells existing in the community before the 'Zemecha' programme started within a radius of (a) 1 km (b) 2 km (c) 3 km (d) others
3. Number of wells to be dug during the :

	by hand	by machine
1st quarter		
2nd quarter		
3rd quarter		
4th quarter		

4. Under the 'Zemecha' programme

Number of wells dug	Depth
	10m 10 - 20 m 20 - 30 m
(a) by hand	
(b) by machine	

5. Available manpower for digging wells.
 - (a) student participants (b) community
6. Is work completed programmes according to schedule as specified in No. 3 above?
 - (a) Yes ☐ No ☐ (b) if no specify

The reasons :

- (i) Lack of equipment (List missing equipments)

.....

.....
- (ii) Lack of skills - (List types of skills lacking)

.....

.....

(iii) Lack of co-operation comment

- (a) Within students
- (b) Within community
- (c) Between students and community

(iv) Lack of leadership (describe)

(v) Other reasons (specify)

B. Construction of Ponds

(i) Number of ponds required in the community at the rate of one pond within a radius of

- (a) 4 km
- (b) 5 km
- (c) 6 km
- (d) other

2. Number of ponds existing in the community before the 'Zemacha' programme started within a radius of : (a) 4 km (b) 5 km

- (c) 6 km (d) other

3. Number of ponds to be constructed during the

- (1) First quarter (2) Second quarter
- (3) Third quarter (4) Fourth quarter

4. Number of ponds constructed so far by the 'Zemacha' programme

C. Construction of reservoirs and water tanks

(1) Number of reservoirs required for the community

(2) Number of reservoirs available

(3) Number of reservoirs constructed by the 'Zemacha' programme

(4) If not constructed, give reasons

(5) List types of water tanks available in the community and indicate the volume of water they contain in cubic litres

(6) Are the water tanks locally made? Yes No

(7) If no give reasons

(8) Have water tanks been made by the 'Zemacha' programme?

- Yes No

(9) If yes indicate types and number of water tanks that have been made.

TypesNumber

.....

.....

10. If no, give reasons

D. Protection of spring water

- (1) Number of springs available in the community
- (2) How many of these springs have been enlarged by the students
- (3) Describe the steps taken to improve the sanitary conditions of springs such as (fencing, cleaning etc., and how many were improved)

II. Building of Boards

A. Construction of planned feeder roads

1. Have you required master plan of feeder roads from Highway Authority
Yes No
2. If no, give reasons
3. If yes, give number of kms constructed in collaboration with Highway Authority
4. Type of road constructed
(a) gravel kms (b) tar kms

B. Construction of inter-village roads

1. Was survey made before construction? (a) Yes No
(b) If no, give reasons
2. If yes how many kilometres of road needed to be built ? kms
3. How many kms of road were constructed by students? kms
4. The extent to which villagers participated. Describe
5. If target programme for construction is not achieved, describe the reasons

III. Land Reform Proclamation

A. Land measurement

Is land survey project undertaken in the community?

- (a) Yes No
- (b) If no, give reasons why
- (c) If yes, how many units of 400 hectares have been surveyed ?
(a) units
(b) No of sub-units of 10 hectares measured sub units

2. Redistribution of land

How many farmers have been assigned to the units of 10 hectares measured

3. Describe problems encountered in surveying and distributing land to the farmers

IV. Construction of schools.A. To build 140 primary 4-classroom schools

1. Number of schools available in the community

2. Were the students required to build

(a) Primary school units Yes No

(b) Community center halls Yes No

3. If no, give reasons

4. If yes, what are the number of primary 4-classroom-school units built?

5. If a community center halls is built, what is the size in square meters ?

6. Describe the extent to which the community participated in the building of the schools and community hall?

7. Describe problems encountered if any

V. Introduction of modern and inexpensive technological innovations.

1. Identify which of the following simple technological innovations have been introduced in the community

(a) Pumps developed to draw water from well using wind power

Yes No Number being developed

(b) Hand pumps developed for water wells

(c) Clay block (bricks) being made for construction

(d) Clay block (bricks) being made for construction

2. List other kinds of technological innovations introduced.

3. If no new technological innovations are introduced, give reasons :

4. Describe community participation as related to the development and introduction
new innovations
.....

Stage Three

Processing of data collected.

Showing quantitative data of achievement and failure in terms of objectives, given under
'Ethiopia Tikdem'

- (a) Types of activities performed by 'Wereda'
- (b) Quantitative achievement in these activities
- (c) Comparative analysis of activities by 'Wereda' 'Awraja' and 'Province'.

Summary and recommendation will be submitted to all concerned.

The stated reasons for non-fulfillment of plans will be categorised under

- Lack of equipment, material and money
- " skills
- " leadership
- " proper attitude towards the programme
- Others

These categories will be coded and analysed.

ANNEX 14

SELECTIONS FROM PRIMARY 6 SECONDARY SCHOOL IN SOMALIA

Ahmed Gure Ali

Galib Musa Afi

I. The problem

Are our primary leaving examinations useful instruments for the selection of students to post-primary schools?

II. Reasons for study and description

The Ministry of Education conducts centralized leaving examinations for the primary school students who are at the termination of their primary education. This category of students sits for the same examination in all parts of the country. After the results are out, the students are, on the bases of their scores, selected to go to post-primary schools. Post-primary schools are classified into:

A. general secondary schools; B. vocational secondary schools:

1. technical schools
2. nursing schools
3. veterinary schools
4. commercial schools
5. teacher-training schools
6. agricultural secondary schools.

Since this selection decides the future of most of the students, the matter has become of great concern to the Ministry of Education in our country. This being the case, we have to start with this project which aims at the evaluation of whether our selective examinations are predictive. Another reason for the study is to guide the examination board, raters and other people involved in these examinations, to modify their ways and means if the examinations are not performing the objectives for which they are set.

Undue expense will not be needed for undertaking this project because: (a) the results of examinations can be easily obtained from the Ministry of Education; (b) students and schools chosen as samples will be within reach and they may be visited without travelling long distances.

III. General objectives

- A. To validate the primary leaving examination to channel candidates to the different post-primary schools.
- B. To improve the system of selecting students to post-primary schools.

IV. Specific objectives

- A. To find out whether our leaving examinations predict the suitability of students for the schools to which they are channelled.
- B. To find ways and means to compromise the individual interest of the student and the national

desire, because as things stand today, many students end up in schools chosen for them without due consideration of their interests.

C. To improve our system of examinations in general.

V. Target population and sampling

The target population will be all those students who graduated from primary schools in June 1973 and June 1974 who are already studying in the various post-primary schools. The 1973 graduates will have completed their second year of post-primary school in 1975 and the 1974 graduates will have finished the first year of primary education in 1975.

Total population of the 1973 graduates = 4,000 students.

Total population of the 1974 graduates = 6,000 students.

Sample design

Type of school	No. of schools	Population		No. of schools	SAMPLE	
		1973	1974		1973	1974
General secondary	21	2 000	800	2	100	60
Agriculture	1	40	40	1	40	40
Veterinary	1	40	40	1	40	40
Nursing	3	120	120	1	40	40
Commercial	2	140	140	1	40	40
Technical	3	120	120	1	40	40
Teacher training	2	600	1 200	1	60	60

VI. Instrument construction

Instruments of measurement shall be as described below bearing the following in mind:

1. All students who graduated from primary schools in 1973 and 1974 had the same primary leaving examination.
2. At the post-primary level, there are variations between one type of school and another in regard to curriculum. There are, however, certain subjects which are the same in all post-primary schools. Of these subjects we have chosen English, mathematics, geography and biology, whose scores will be our data.
3. At the post-primary level, students are examined on all the subjects they study at the end of each year. Each school, however, has its own examination.

Since all post-primary school students do not take the same examinations at the end of the year, it is necessary to correlate the scores of each school in each of the four subjects mentioned above.

The form one scores for the 1973 graduates are available and can be procured from the Ministry of Education.

Using Pearson Product Moment Correlations, we shall try to find out whether the correlations for each subject are high or low.

Correlation design

School X scores

Student name	SUBJECTS AND SCORES							
	English		Maths		Geography		Biology	
	1973	1974	1973	1974	1973	1974	1973	1974
Student a	50	60	70	90	40	80	80	20
Student b	80	70	60	60	75	65	65	75
Student c	75	65	45	50	30	30	20	30
Student d	35	50	75	80	30	25	60	70
Student e	50	55	60	65	35	45	65	50

Mean for the primary leaving examination, English = $\frac{290}{5} = 58$

Mean for the Form I English examination = $\frac{360}{5} = 72$

For English

$$\sqrt{\frac{\sum [(50-58)(60-72)^2 + \sum (80-58)(70-72) + \sum (75-58)(65-72) + \dots]}{\sum (50-58)^2 \cdot \sum (60-72)^2 + \sum (80-58)^2 \cdot \sum (70-72)^2 \dots}}$$

The same will be done for each subject. Since each school takes a different examination at the end of each year, each type of school will be dealt with separately.

VII. Data collection and data processing

A. The 1973 and 1974 leaving examination results can be obtained from the Ministry of Education, which keeps a record of them. The form one post-primary examinations for the years 1974 and 1975 can be procured from the schools from which the samples are chosen. The primary leaving examination data will be collected in May 1975. The form one post-primary scores of the primary graduates of 1973 will also be collected from the schools in May 1975. The form one scores of the 1974 primary graduates will be collected from the schools in July 1975 when the examination results are ready.

B. All data processing will have to be done by hand since there might be no access to computers or other suitable machines.

C. When the computation is completed, the correlations have to be studied very carefully for each subject or topic. If the correlations are positive and high, we can conclude that the leaving examinations in the years 1973 and 1974 were good predictors which channelled students to the appropriate post-primary schools. If on the other hand the correlations are negative or low, then the conclusion that the leaving examinations were not predictors will be reached.

ANNEX 15

THE EVALUATION OF THE WORK OF RURAL EDUCATION CENTRES IN LESOTHO

Mercy Rapelesega Montsi

STRUCTURAL ORGANISATION

Background

New plans for the qualitative and quantitative developments of primary education in Lesotho are directed towards regulating, and even restricting entry into formal primary education by introducing a restricting age-entry policy.

There has been a disinvestment in education through heavy drop-outs particularly at the early primary levels. As these pupils return to the community, they have no supporting facilities to offer them some alternative education.

The increase in population, limited cultivable land, over-grazing improper farming methods methods have all added to the depletion of the soil in most areas. This then necessitates the introduction of rural education for an intensive (as opposed to extensive) farming, soil preservation, etc.

Several independent bodies such as the university, the Ministries of Health, Agriculture and Education have made attempts to offer various aspects of functional rural education to solve the above-mentioned problems. But so far no co-ordinated and relevant materials have been produced.

These problems, therefore, have made the development of non-formal education and basic functional rural education in particular an obligatory integral part of the development of the whole education system in Lesotho. Well-structured, co-ordinated and efficient rural education programmes are to be established to complement the formal education system.

General structure

It is intended that each of the nine districts will have at least one Rural Education Centre (REC) where courses on basic functional literacy, functional adult education and continuing adult education will be given. Each REC will have a committee (including a REC officer and assistant) to be responsible for local administration and decision-making on things of local interest.

The RECs will be supervised by a Rural Education Development Centre (REDC) which will also produce materials for the various courses and classes. The REDC will be manned, among others, by curriculum developers, evaluators and subject specialists in various fields such as agriculture, home economics, adult education, cottage industry, mathematics, etc. Materials will be produced in the form of self-instructional booklets.

It is envisaged that each REC will offer two six-month courses per year on basic functional and one four-month course on functional adult education. Pupils for the first course will be head boys, illiterate girls and adults and basic agricultural skills will be integrated into this course.

Pupils for the latter course will be drawn from the literate population of the community. There will also be other courses on various aspects of functional rural community education given according to the demands of the communities.

GENERAL OBJECTIVES OF THE EVALUATION STUDY

Evaluation forms a very important integral part of every curriculum development programme in education. It is even more important in new education systems in developing countries where we are making an effort to replace irrelevant, inefficient, inherited and unadapted education systems with the more relevant. It is impossible to ensure relevance and efficiency without building in evaluation in these new systems at all stages of the curriculum development process.

It would be too ambitious, though, to prepare one evaluation schedule or project for all of the aspects of these rural education programmes. This evaluation project is an evaluation of the Basic Functional Literacy and Functional Adult Education - Home Economics. As will be seen, part of this project will give feedback on the weaknesses in the curriculum for these two programmes.

The following have been selected as the general objectives of the project and will also be used as the objectives of the evaluation study:

I. Basic Functional Literacy

1. To measure the extent to which this programme helps to increase literacy in the communities it is serving.
2. To measure the extent to which the programme: (a) helps the graduates improve their general farming methods; (b) helps the graduates enter into higher rural education programmes and even into the formal education system, and (c) helps the graduates enter into new and more economic activities, e. g. new jobs.

II. Functional Adult Education - Home Economics

1. To measure the mastery of the course objectives.
2. To measure the extent of application of the course objectives by the course graduates.

SPECIFIC OBJECTIVES

I. Basic Functional Literacy - 6-month course

1. To discover the mastery of the course objectives by giving a summative achievement test at the end of the course. (The course includes arithmetic, writing, reading and general knowledge in agriculture and rural life.) The test may be pencil and paper and/or practical.
2. To discover the extent to which the graduates apply the course objectives by measuring the difference in specified community activities from the beginning of the course and six months after the course. After the course expected activities in the community or at least in the homes of the graduates include such things as: (a) ability to make proper terraces of fields

and garden plots across a slope instead of down the slope to avoid erosion; (b) ability to make proper seed-beds at the right season - just before the rainy season to increase moisture absorption; (c) controlled grazing measures to avoid over-grazing which results in soil erosion; (d) building of fowl-runs to control roosting of fowl; (e) ability to use simply written and heavily illustrated materials on agriculture and other fields for self-improvement in agricultural skills; (f) ability to prune fruit trees at the right season.

II. Functional Adult Education - Home Economics - 4-month course

1. By using a paper and pencil and/or practical test, measure the achievement of objectives at the end of the programme. Major topics covered in Home Economics include nutrition; food production, preparation and preservation; child care, Family Life Education, sewing, budgeting, etc.
2. To find out the extent to which the sampled graduates apply their new knowledge in their whole life and improvements in home life by observing changes in things such as: (i) practices of keeping gardens; (ii) sending children for vaccinations; (iii) reduction of incidents of malnutrition in children; (iv) whether a weekly menu for the family is prepared; (v) whether there is a balanced diet by asking specific questions on the food that is consumed in the home; (vi) whether clothes are made in the home; (vii) whether a budget is kept, etc.

This information will be gathered by interviews with the course participants in the sample. On the first occasion this will be done at the beginning of the course (interview at course) and on the second occasion six months after the course (interview at their homes).

The summative test results given at the end of each course will indicate objectives that have been mastered or not mastered by a sufficient number of students (say 80 per cent) and this information will be fed to the curriculum developers for programme improvement.

The difference in the home activities (as shown in 2 above) from before the course and six months after the course will allow the evaluators to identify practices not affected by the programme. This too will be feedback to the curriculum developers for programme improvement.

At the same time as I and II, information will be gathered on independent variables (either by questionnaire or observation): (i) students' attendance; (ii) classroom physical structure; (iii) students' home background; (iv) students' age, sex, status in home, etc.; (v) students' employment status; (vi) time allocated to the teaching of the different objectives; (vii) supporting staff, etc.; and variables in the whole home and community, such as: (i) other course(s) with related objectives; (ii) access to radio programmes; (iii) proximity to stated employment areas, etc.; (iv) proximity to formal primary, secondary and stated tertiary institutions, etc.

TARGET POPULATION

Three RECs are expected to start functioning in 1976. A fourth REC will be added in 1977. The centres will each have, in 1976, 4 classes of 30 students each in BFLP and 4 classes of 28 students each in FAEP. For 1977 each REC will have one more CFL class and one more FAE class but enrolments in FAE will be reduced to 20 students per class.

Although the mastery tests may be administered to all students of the chosen cohorts for formative evaluation of the course the following will form the target population: (1) A one in four sample will be drawn from the second cohorts of the BFLP from the first three RECs. This will be about one-fourth of 360 or 90 students. (2) A one in three sample will be drawn from the second cohorts of the FAEP from the first three RECs. This will be about one-third of 300 or 100 students.

DESIGN OF STUDY AND INSTRUMENT CONSTRUCTION

1. A team of curriculum evaluators of the REDC will sample students as stated above to form the target population. This will be done during the first month of the course. (It is difficult for the writer to set criteria at this stage for sampling as the RECs are not yet identified. The evaluators will set these criteria at the first or second week of each course.)

2. During the second month of the course the evaluators will identify communities from which the sampled students come. On the basis of the course content and objectives, they will draw up a yes/no observation check-list which they will use to observe activities in homes of the sampled students. It is part of the plan that supervisors follow up students to ensure application of objectives. These supervisors may be trained and used in this exercise. This will be used later in comparison with the mastery test scores and the second survey of the community to check the effect of the absence or presence of these activities in learning and the effect of the course on these activities respectively.

At about the same time the evaluators will start collecting other information about the school structure and the student, e. g. sex, age, employment status, marital status, size of family, social economic status (to be defined), school - teacher background, physical structure of school, etc. The teacher/instructors will keep an attendance register as one of the independent variables.

3. Two weeks before the end of each course the evaluators will administer the achievement test. The test items will have been formulated on the basis of the content analysis of each course and will also have been tested for validity and reliability on the first cohorts of the respective courses. The test results will indicate the level of mastery of the objectives.

4. At the same time as 3 (above) students will be given a study questionnaire aimed at soliciting their impression of the course. It will reflect areas students enjoyed and areas they did not enjoy; topics that they found relevant or irrelevant; ideas of ways in which they feel they can or have already applied the objectives of the course; how they intend to maintain the education, etc.

5. Teachers will be given a similar questionnaire for their views on what they found easy to teach; what they found irrelevant; what should have been included, etc.

Results of 4 and 5 help to identify important independent variables affecting the student learning and help curriculum developers to improve on the programme by reacting as positively as they can to the outcomes.

6. Six months later the observation checklist is used again to study the activities in the students' home lives as affected by the course.

At the same time other possible supporting factors such as radio programmes, and other related informal educational activities are studied in the surrounding.

The difference in activities in the checklist before and after the course reflects the impact of the course on the various activities. And as these activities can be related to specific objectives in the course, this will give a measure of which objectives have been mastered at the application level and which have not been applied. This information is fed to the curriculum developers for appropriate changes in the programme.

7. To study the extent to which the respective programmes help students enter into higher rural education programmes, into formal education programmes and into employment, a tracer system may be constructed by the evaluators and those students who get into these channels and which could be further followed up through their next course/employment/programmes, etc.

A similar flow chart can be drawn for the 4-month Functional Adult Education course.

The analysis and flow chart preparation assumes that there will be a computer as the analysis will be done either late 1976 or early 1977 and it is expected that the Statistics Bureau will be having a computer.

The first month for the project shown in the flow chart refers to the first month in which the first course will begin.

ANALYSIS

Analysis objective: (1) test for achievement of objectives; (2) test for application of objectives. The dependent variables are: (1) achievement of objectives; (2) application of objectives. The independent variables include: (1) REC structure - e.g. facilities in terms of staff and materials, time allocation. (2) Home background - e.g. economic status.

1st Analysis - analysis between centres. This first analysis involve:

- (1) Calculation of the means for each variable for each REC.
- (2) Correlation between achievement and each variable.
- (3) Regression analysis where the formula would be:

$$(i) Y = X_A + X_B + X_C + X_1 + X_2 + X_3 + \dots + X_n$$

where Y = achievement or application, i.e. dependent variable.

X_A = 1st Rural Education Centre.

X_B = 2nd Rural Education Centre.

X_C = 3rd Rural Education Centre.

X_{1-n} = independent variables.

(For the analysis, the 3 RECs can be represented as: A → 1, 0; B → 0, 1; C → 0, 0.)

- (4) Calculation of standard deviations for students mean achievement and students mean application. The students mean achievement and students mean application reflecting the achievement and application for each REC respectively.

This information can be tabulated thus for comparisons between centres.

Flow chart - 6-month BFL course

Schedule	Time	REC selection	Sampling of students	Test construction	Questionnaire construction	Checklist construction	Staff training	Printing	Data collection	Coding punching analysis	Write-up
117 Try out materials	1	Select 3 RECs		Content analysis	Identify variables	Identify variables					
	2										
	3			Write test items	Try out questionnaires for students & teachers	Try out checklist				Prepare programmes for uni-variances and regression	
	4										
	5										
	6			Try out test for course	Finalise questionnaire	Finalise checklist					Write up each stage as it is accomplished
	7		Collect data on 2nd cohorts	Item analysis Finalise test items			Train observers & testers	Print checklists, questionnaires & tests		Prepare coding and punching schemes	
	8		Draw sample from 2nd cohorts 1 in 1						Fill out checklist for first instance on community information (interview at school)		
	9								Observe school surrounding variables		
	10									Punch & code for checklist on first instance	
	11										
1st study starts	12								Test 2nd cohorts, administer questionnaire to students and teachers		
	13						Retrain teachers & observers			Coding & punching	
	14										
	15-17										
	18							Reprint materials if necessary	Collect community data on 2nd instance for 2nd cohorts - interview at home		
2nd study starts	19		Continue study on 3 RECs	Collect information on 4th cohorts			Retrain observers if necessary			Code & punch data	

Flow chart (contd.)

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Schedule	Time	REC selection	Sampling of students	Test construction	Questionnaire construction	Checklist construction	Staff training	Printing	Data collection	Coding punching analysis	Write-up
2nd study starts	20	Sample 4th 1 in 5 → 90							Collect community data for 1st instance on 4th cohorts - interview at school		
	21									Coding & punching Data analysis on 1st cohorts	
	22										
	23										
	24										
	25								Test 4th cohorts Give questionnaire to teachers and students		
	26-29									Coding & punching	
	30										
	31								Collect community data on 2nd instance Interview at home		
	32-39									Coding & punching Data analysis	

BUDGET

The budget for this project has been incorporated in the budgeting for the whole Rural Education Project which is still under review. Hence, no detailed budget for this project is given here.

ANNEX 16

REGIONAL SEMINAR ON EDUCATIONAL EVALUATION
INSTITUTE OF EDUCATION DAR ES SALAAM

QUESTIONNAIRE

Evaluation of the course

The Regional Seminar on Educational Evaluation which you are attending is the first such seminar ever sponsored by the World Bank.

Would you please answer the following questions to give information to the seminar planners in the following topics? This, we hope, will help with the planning of future seminars.

PART I. PREPARATORY PHASE OF COURSE

1. How were you first informed about the seminar? (Please check where appropriate.)
It was through:

	Public announcement		Private information	
	P	O	P	O
The Unesco agency in my country	2	-		
Official channels of my country	13	1	9	1
Other persons (please specify)	-		-	

2. How much previous notice would be necessary so that the majority of possible applicants in your country could be adequately informed? At least:

	P	O	
3 months	14	2	NR - 1
6 months	9	-	
9 months	-	-	
If more, specify			months

3. If the World Bank was to offer several courses like the present one, and more than one person from your country might participate, which of the following situations would be more helpful to your country?

Only one person at each course

P	Q
1	-

Two persons at one course

7

More than two persons at one course

16	2
----	---

If you checked "two or more persons", please indicate which type of participation would be best:

Persons from the same institution at the same course

P	Q
6	1

NR - 2

Persons from different institutions at the same course

16	1
----	---

4. Did you find April an adequate time for the seminar, considering your regular work at home?

Yes

P	Q
20	2

 No

P	Q
4	-

If not, which month would you prefer? June or November

Please give your reason for this choice School holidays

5. What would be the maximum amount of time you could spend on a similar course?

 weeks

2 weeks - 3	10 weeks - 1	NR - 2
4 weeks - 3	12 weeks - 6	
6 weeks - 3		
8 weeks - 7		

6. Do you think the information in the first official announcement of the seminar was sufficiently clear to your government to enable them to choose the appropriate candidates?

Yes

P	Q
18	2

 No

5

NR - 1

If not, please specify what should have been clearer

Regional Seminar on Educational Evaluation

7. In order that participants can prepare themselves adequately for the seminar, how many months before the beginning of the course should the participants be informed of their final selection by IIEP and of the tasks they should undertake?

P	O
6	

1-2 months

P	O
12	2

3-4 months

P	O
6	

5-6 months

P	O
-	

7-8 months

If more, specify.

8. Please comment on the information given in your letter of acceptance by IIEP on individual and group projects:

2 responses in general OK.

NR - 16

9. Was the information given by IIEP on accommodation satisfactory?

P	O
6	1

Yes

No

P	O
4	-

NR - 15 1

If not, why?

No detail on accommodation.

10. What advice would you give to a participant before he/she starts a similar seminar next year?

1. *Need for participants to prepare themselves, particularly statistically, before course.*

2. *Stress intensive nature of course and dedication required.*

3. *Emphasise the project to be finalised by end of course and the necessity to bring project data to course.*

4. *To have more detail on residential accommodation, weather, etc.*

PART II. THE SEMINAR

11. Did you experience any language difficulties in the course?

P	O
7	1

Yes

No

P	O
17	1

If 'yes', please indicate the main difficulties.

Reading

2

Listening

2

Speaking

Writing

Use of technical terms 6 + 1

12. Do you have any comments on the daily time-table? (working hours, coffee breaks, lunch breaks, etc.)

Please specify 1. Early start and longer lunch break (1 1/2 - 2 hours).

2. Not enough time for private work.

3. Timetable too compressed.

13. Please check appropriate cells in the following grids:

Your benefit from the seminar compared with what you expected Time allotted during the seminar

A. less than expected as much as expected more than expected too little about right too much

	P	O	P	O	P	O	NR	P	O	P	O	P	O	NR
Lectures	1		18		2			5	1	13		1	3	3
Discussion	6		17		1	1	1	6		14		2	1	3
Practical work	14		7		2	1	2	17	1	5			-	3
Individual and group projects	7		12		4	1	2	14	1	10			1	
Consultation	7		14		3	1	1	10		10		1	1	4
B.														
Systems evaluation	4		16		1	2	3	9	1	9			-	7
Curriculum evaluation	4		19		2	1		6	1	14		1	-	4
Teacher education evaluation	9		13		1	2	1	10	1	10			1	4
Selection evaluation	1		16		1	3	5	3	1	13			2	7
Identification of objectives	-		19		5	1	1	4	1	17			-	4
Design	7		15		2	1	1	9	1	11				5
Measurement	7		13		2		4	12	1	7			2	4
Statistical analysis	10		9		4	1	2	13	1	8			1	3

14. If you have checked "less than expected" or "too little" for any cell, please comment.

1. Too little time to absorb the amount of information given.

2. More time for examples in statistics.

15. Have you learned any ideas or techniques during the seminar which you believe will be of value in your present work in your country? Please specify

(5 most frequent responses)

1. Statistical analysis.

2. Everything helpful.

3. Specification of objectives.

4. Design and measurement.

5. Curriculum evaluation.

16. How would you evaluate the sequence of topics of the seminar?

weak	-	moderate	8	-	good	16	2
------	--	----------	--	--	------	---	--

Comments (in particular, what changes in sequence of topics you would recommend).

More statistics at beginning.

More curriculum evaluation earlier.

17. How would you rate the general level of the seminar in relation to your past training?

Too low	-	Adequate	20	2	Too high	4	-
---------	--	----------	---	--	----------	--	--

Please comment

More time needed to cover work.

18. In terms of the content of the seminar, do you think that a four-week programme was

Much too short?	8	Too short?	13	About right?	1	Too long?	1	Much too long?	1
-----------------	--	------------	---	--------------	--	-----------	--	----------------	--

Please comment

1. *Longer time needed for fuller understanding.*

2. *Group work time should be extended.*

19. In general, was the content of the seminar relevant to the educational problems in your country?

Of little relevance		Fairly relevant	6	1	Highly relevant	18	1
---------------------	---	-----------------	--	--	-----------------	---	--

20. Were there some fields of evaluation which you believe should have been included when planning this course, in addition to the topics covered?

	P	O		P	O	
No	11	1	Yes	9	1	NR - 4

If yes, please specify

Evaluation of foreign language teaching.

Computer programming.

Simple statistics for beginners.

21. For your problems, are there some topics which you believe should have been covered in the seminar which were not?

	P	O		P	O	
No	19	1	Yes	1	1	NR - 4

Which topics would you have liked to have been covered?

Foreign language teaching.

22. Which arrangement do you find most appropriate during lectures on the part of faculty members?

Only one present

NR - 1

All present but not participating during the lecture

All present with partial participation

P	O
3	-

All present with free active participation throughout

P	O
21	2

23. Which of the following types of student participation do you prefer?

Questions and comments after lecture is over

P	O
5	1

NR - 1

Questions and comments during the lecture

P	O
18	1

No questions or comments

24. The reference books given by the World Bank to the participants (for their countries) were:

	P	O		P	
Good	11	2	Acceptable	3	Poor

Please specify:

25. Do you think the distribution of textbooks was satisfactory?

	P	O		P	
Yes	19	2	No	4	NR - 1

If not, please comment

All participants should receive one copy of each book.

26. What observation (either positive or negative) do you have about the physical conditions of the seminar (e.g. seating arrangements, visual aids, etc.)?

1. Adequate or good.

2. Lecture room too small and uncomfortable.

3. Too noisy.

27. How would you rate the prevailing atmosphere during the seminar?

Between the participants

Between faculty and participants

Between participants and the Institute of Education supporting personnel (i.e. administration, secretaries, etc.)

Poor		Fair		* Good	
P	O	P	O	P	O
1		1		21	2
1		3	2	20	-
6		9		6	2

28. What were (if any) the problems between faculty and participants?

1. No problems.

2. Faculty and participants should have lived closer together.

29. Did participants who went to Iringa find the tour worth while?

	P	O		P	O		P	O	
Yes	13	1	No	1	-	Did not go	10	1	NR - 1

If not, please comment

1. Journey too long and not relevant to seminar.

30. Were the arrangements made for the trip satisfactory?

	P	O		P	O
Yes	5	1	No	9	-

If not, please comment

Generally poorly organised.

31. Were you living on the campus?

	P			P	O
Yes	9		No	15	2

Note: If you are not resident on the campus, then you should not complete questions 32-36.

32. Were room facilities (For questions 32-36 inclusive the N = 9)

Comfortable	2	Not bad	3	Poor	4
-------------	---	---------	---	------	---

Please comment

1. *Room and bed irregularly cleaned and changed.*

2. *No drinking water.*

3. *Too much noise.*

33. Was the food generally

Good	6	Average	3	Poor	0
------	---	---------	---	------	---

Please comment

Food good but little variety.

34. Access to town from place of residence was

Easy	1	Difficult	8
------	---	-----------	---

Please comment

Public transport difficult, unreliable and time-consuming. Taxis expensive.

35. Were participants able to meet each other informally for discussion at the end of the working day?

Yes No

Please comment

No common room for informal meeting.

36. Facilities for recreation and relaxation on campus were

Adequate Inadequate

37. Do you have any general remarks on the conduct and content of the seminar?

1. Well conducted-faculty, hard-working and co-operative.

2. Content too much for limited time.

PART III. FOLLOW-UP

38. In terms of the evaluation training needs in your country, do you think that the World Bank should repeat such intensive seminars in the next three years?

No Unsure Yes

If yes, please mark how many candidates you think your country would like to send during the next three years.

1 2-3 4-5 more than 6 don't know

39. In what other field(s) of educational planning would you suggest that similar intensive courses should be held, considering the needs of your country? (If you are not able to judge, please say so.)

Curriculum development.

Concepts and techniques of examinations.

40. Which of the following type of course (check one) do you consider most appropriate for the kind of evaluation training you have just received?

	P	O	
International	9	-	NR - 1
Regional	3	2	
National	11		

Please comment further if you wish

41. In the future, in what ways could IIEP help you keep in contact with or help become acquainted with:

(a) Current work in educational evaluation in other countries

1. *Organise exchange of publications.*
2. *Through correspondence or newsletter or journal.*
3. *Through further seminars.*

(b) Persons working in your speciality

1. *Through seminars.*
2. *Addressees of persons in the field of evaluation.*
3. *Through publications.*

(c) Others (please specify)

42. If you have any other comments on any aspect of the course (in its preparation, conduct or follow-up) which have not been mentioned above, please write them below:

1. *Follow-up seminar next year for same group.*
2. *All participants should be residents.*
3. *Faculty good - wealth of experience of faculty appreciated.*
4. *Better accommodation - more contact with Tanzanians - more social life.*
5. *More local faculty and faculty from 'socialist' countries.*

We thank you for your co-operation and will inform you of the main results of this questionnaire on Wednesday 30 April 1975.